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Development of a model to integrate patient, staff & doctor satisfaction attributes and predictors into senior level healthcare management decision-making & policy development

By

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A dissertation submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy.

The Health Management Group, School of Social & Human Sciences

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v Abstract

This thesis addresses the question of the significance or added value derived from directly integrating client (defined as patients, doctors, and staff) satisfaction level predictors and attributes into senior level healthcare decision-making and policy development processes.

It poses the questions:

1. Is satisfaction level measurement for patients, doctors and staff an important requirement for improved managerial efficiency and effectiveness? If so, then why?
2. Are the satisfaction attributes for each of these groups associated? What are the implications of such an association on senior managerial decision outcomes?
3. How to best integrate satisfaction predictors and attributes to improve decision-making and policy development?

To address the above, the thesis proposes a unified model to allow for the utilisation of satisfaction study findings to inform both policy and decision-making processes. Through client satisfaction impact assessment (CSIA) methods, the model may permit healthcare managers to achieve higher levels of client loyalty, by better understanding, predicting and possibly influencing client needs, expectations and satisfaction. Modelling is a means that enables senior managers to simulate realistic scenarios while avoiding costly and/or unethical trial and error strategies. Therefore, modelling acts as a decision-aiding methodology.

The model links health management decision-making process and frameworks with key attributes and predictors of user/patient, doctor and staff satisfaction, to show implications on the development of sound policy and decision outcomes, while avoiding pitfalls. It goes beyond simple measurements of satisfaction, by examining its multi-dimensional nature, decomposing it into constituent attributes, and investigating its predictors. Satisfaction attributes are viewed as an extension of people's needs and expectations.

The data corroborates the work of other researchers as to the complexity of the concept of satisfaction and its expression. Data were collected through focus groups, household surveys, and exit questionnaires in the West Bank (Palestine) as a case study; the thesis outlines the need and practical methods to harmonise healthcare organisation policy setting and evolution with patient, staff and doctor expectations and beliefs, to the extent possible. The resulting synergy from this harmonisation would work to reduce some of the inherent uncertainty associated with decision outcomes by lowering the risk of dissonance between management and its main client groups (patients, staff, medical doctors). Dissonance, or position discrepancy, is viewed as a key contributing factor to reduced client satisfaction and increased decision uncertainty.

From the organisational policy development perspective, the model reveals the significance satisfaction attributes and predictors of all three client groups (patients, staff, medical doctors) and subsequent decisions they make (observed behaviour) through the institutionalisation of systematic methods to incorporate vital information at policy levels. The determinants of these decisions are further analysed including beliefs, perceptions, attitudes, and intentions to enhance the understanding of how these factors fit into decision-making and policy development processes. It further points to the consequences healthcare managers may encounter when the opposing needs and expectations (multi-attributes of satisfaction) on these groups are not closely examined.

1 Introduction

On a day-to-day basis, it is the healthcare manager who is entrusted with responding to problems, achieving set targets, and making policy recommendations operational. The decisions a manager makes impact on organisational systems, employees, clients, suppliers, insurers and other stakeholders. The decisions are also influenced to a large degree by the responsiveness and efficiency of organisational systems, factors related to staff, contractors, and other stakeholders.

The decisions involved in these changes are often complex due the nature in which people in and outside a healthcare system perceive and respond to change, as well as to the possible association and conflict of various attributes of satisfaction of the clients of management (Patients, medical doctors, health professionals, staff, suppliers, boards, etc). Decisions that may seem remote from issues related to patient and staff satisfaction, invariably ripple through an organisation, and influence attributes of satisfaction. Healthcare systems are organic and interlinked in nature: decision output and outcome cannot be viewed in a vacuum. Managers need to understand patient healthcare seeking behaviour, for it impacts on compliance with clinical care and loyalty to a medical facility. Moreover, managers count on employee cooperation and productivity, to see through successful implementation of decisions and changes. The satisfaction attributes of each client group also cannot be viewed independently of each other.

Therefore, managers need to understand, possibly predict, and perhaps influence variables related to satisfaction when making most decisions or formulating policy. Intuitively, managers and policy makers may know that modifying systems can impact the job satisfaction of their staff and medical doctors, as well as general patient satisfaction, and at times in a conflicting manner. Well thought-out decisions attempting to balance the impact of change to yield optimised satisfaction levels are difficult however, in part due to the lack of models that simulate the inter-relations of client satisfaction attributes coupled with:

- ❑ The very nature of satisfaction, its expression, and how it can be inferred;

- ❑ The fact that attributes of satisfaction change over time and place;
- ❑ Delay is often observed between decision and desired outcome;
- ❑ Intervening and extraneous variables;
- ❑ Variables tend to be institution and culture specific;
- ❑ Time constraints;
- ❑ The phenomenon of selective perception.

Many views exist as to what constitutes “management”. Classical theory (Bell, 1988) tends to be normative by explaining how managers *should* behave: a more quantitative approach rooted in positivist philosophy, which stresses that reality is external and that knowledge is objective nature of knowledge. However, field observations over decades point to the fact that decision makers do not behave as predicted by this theory. For example, studies have shown that preferences between options are strongly influenced by the formulation of a problem (McNeil, 1982). This gave a rise to “decision theory” emphasising the ability to make decisions especially under conditions of uncertainty (Simon, 1956): an approach focusing on analysing the environment and more pragmatic decision-making process even if it results in less than ideal outcomes. This is rooted in a phenomenological philosophy (Husserl, 1946). This philosophy takes the view that reality is a social construct, and therefore it stresses the intangible and non-quantifiable aspects of observed human behaviour focusing less on what can be directly measured, and more on the totality and meaning of each situation.

Indeed studies of the behaviour of top executives (Isenberg, 1988) point to the fact that many successful managers rely on the use of intuition, tackling a multitude of problems simultaneously, focus on interpersonal process, rapid priority setting, and tolerance for ambiguity.

Much of the literature on patient satisfaction and healthcare organisation personnel job satisfaction does not tend to examine the possible association of these two aspects to one another, nor does it examine their links to senior healthcare management functions of decision making and policy development. The multi-dimensional nature of satisfaction, coupled with the complexity associated with multi-attribute analysis

makes it challenging and time consuming to decipher the meanings of satisfaction studies.

Today, the importance of satisfaction measurement is strongly held by many senior managers and administrators; (Avis, 1994; Williams, 1994a; Vuori 1991) however, incorporating findings into operational policy and daily decisions is often left to guesswork, intuition, and the more traditional processes of decision-making that do not incorporate these findings. The stimuli for satisfaction measurement programmes may range from a desire to simply confirm current management policies and decisions, to national or senior directives requesting such programmes, to the quest for more consumer oriented services.

However, studies have not been able to both clearly explain the satisfaction phenomenon or truly understand its meaning. (Williams, 1994a) What are people really expressing through satisfaction surveys and questionnaires? What accounts for the observed discrepancy in results from the various instruments utilised to monitor satisfaction? Indeed, studies have only been able to marginally (up to 20%) account for the determinants of satisfaction (Thompson, 1986). Additionally, much of the research in this field utilises statistical methods to aggregate and summarise various independent variables and known predictors (demographic, social, experience related) in attempts to correlate fluctuations in satisfaction to measurable elements.

More importantly, once satisfaction data are compiled in reports and presented to senior healthcare managers, the manager is faced with a situation that may require action. Most satisfaction measurement programmes present symptoms, and do not address the root causes behind the findings: a manager cannot know the root causes of expressions of satisfaction or dissatisfaction from looking at these reports. For example, findings that may point to a level of dissatisfaction with cleanliness does not readily point to the “where” and “how” of the problem is within the context of a healthcare facility. Are patients expressing dissatisfaction with a physical environment, their perceptions of the quality of clinical care, the more intangible feelings of comfort, and/or to personal communications they experience? The reports may be dealt with to augment existing hard data when framing decisions. It may not

be readily evident that these attributes are a reflection of individual needs, beliefs and expectations rooted partially in variables extraneous to the healthcare facility.

To measure satisfaction, researchers and managers have employed a host of instruments; each with inherent strengths and weaknesses that decompose satisfaction into its constituent attributes: exist surveys, interviews, telephone interviews, observations, focus groups, and household questionnaires. Depending on management's needs, time constraints, resources available, a decision is made to utilise one of the above, and in most settings as a vertical programme with a beginning and an end.

Decision makers vary in what assumptions they make, prior knowledge, preferences, attitudes, policy frameworks, etc. A typical decision-making scenario (Keeney, 1996) may unfold as follows: a problem in the form of management dissatisfaction with the status quo may arise along with the desire to do something about it. The manager then quickly thinks about solutions and generates a number (not all) of options. The decision-maker then selects some criteria to gauge the consequences of the various options. The focus is usually on easy to measure hard data rather than qualitative data.

The process described above usually suffers from narrowly framing the context of the problems or issues in question: due attention is not given to the multiplicity of outcomes a solution may generate, and sometime, like in the case of satisfaction levels of different groups, outcomes working at cross purposes.

For example, a burdened patient appointment and booking system within a facility faced with excessive patient complaints and/or defection of patients to other care providers may see management address the issue of patient overload and long queues by deciding on an appointment booking system that limits consultations to 20 minute per visit (a specific decision output or change) as compared to a current open-ended system. The desired outcome (or objective) is improved efficiency in patient appointment bookings. Patients, whose time is known to be an attribute of satisfaction, may perceive this positively. But doctors may view this as an infringement on their autonomy and react in manner than can undermine the system

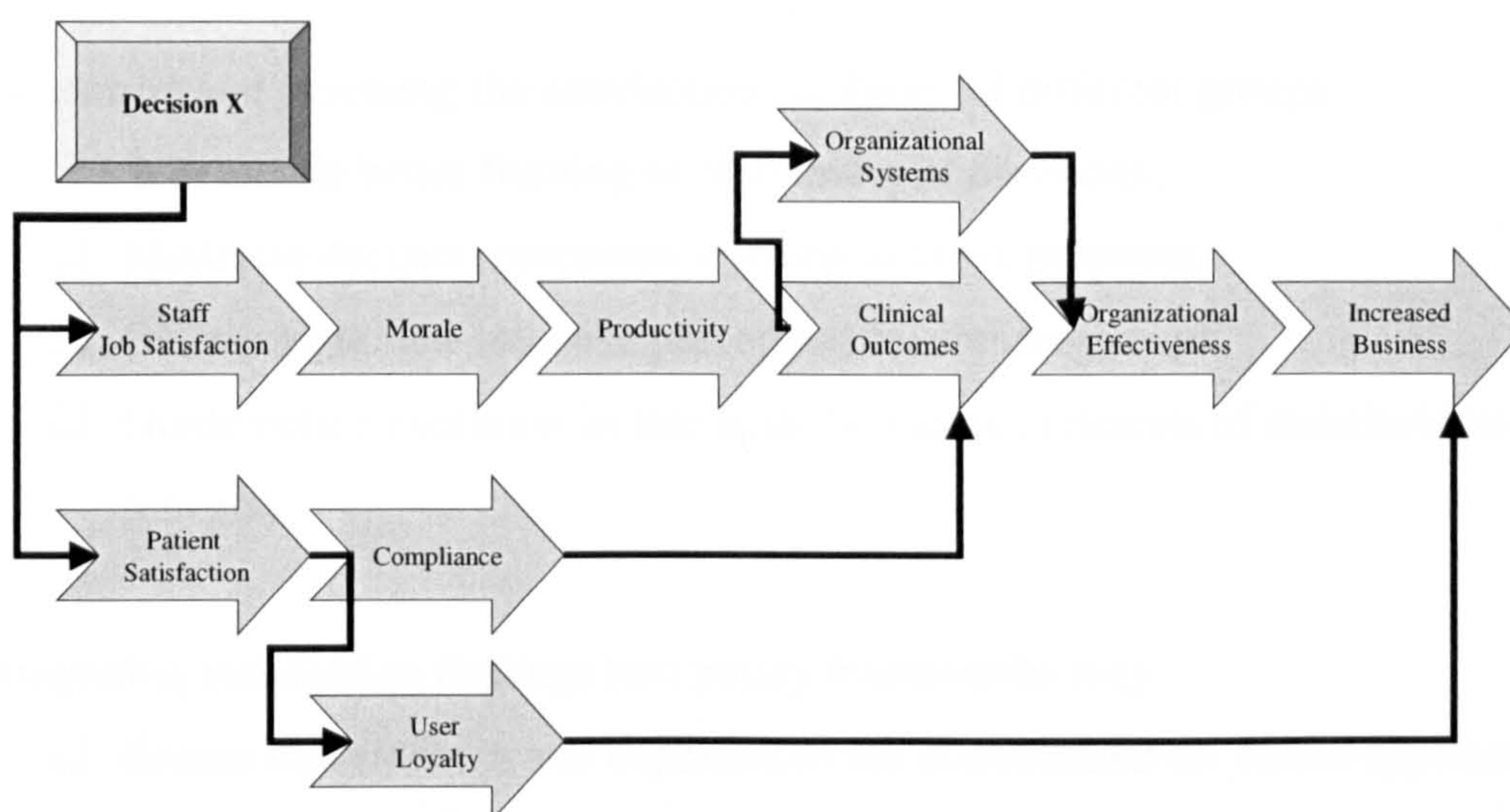
(output) by prolonging consultations. The resulting situation may pit staff responsible for logging and managing appointments against doctor's wishes. Thus what started as decision to address long waiting and offer better a appointment system, evolves into internal conflict and possibly a worse system due to the non-compliance of one group: the doctors. The desired outcome or objective is not achieved.

Could this decision process have been approached differently? What if management anticipated such a clash of interests and pre-empted a negative reaction by addressing the issue of autonomy prior to the decision? Could a clear and well-communicated policy on physician autonomy play a role in promoting harmonious operations: less dissonance between management and its clients? Had managers understood the attributes of doctor satisfaction and used this understanding to partly frame (and inform) the decision making process, they may have been able to predict resistance, and attempt to influence doctors prior to the decision.

In a healthcare organisation, managers interact with a variety of groups, both external and internal; patients, suppliers, insurers, government officials, doctors, allied medical professionals, support staff, students, etc. From the perspective of quality customer service, these groups can be viewed as clients of management. The obvious customer is usually defined as the patient/user; however, all others may be viewed as internal customers. In this sense, management is cast in a role of supporting the organisation (both systems and people) in realising maximal possible potential.

Figure 1-1: The importance of satisfaction

Importance of Satisfaction



This thesis will focus on the largest groups: medical doctors, all other staff (allied medical, administrative, and other support staff), and patients (or users). These three categories represent the main players of provider and recipient of care within the context of health delivery from the view of management. Other groups (suppliers, insurers, government officials, etc) are of course important and relevant to decision-making, but will not be directly addressed in this thesis, although one can extrapolate many of the findings to their special needs.

To summarise, and from a senior healthcare management perspective concerned with improved efficiency and effectiveness:

Satisfaction measurement adds value for it enables understanding client needs, prediction of behaviour, and offers insight into ways to influence this behaviour thus reducing managerial decision outcome uncertainty and risk (figure 1.1 above).

Satisfaction studies may:

- ❑ Lead to an understanding of client needs and expectations, which when addressed appropriately, will work to lower dissonance (position discrepancy) within an organisation, leading to coherence and shared goals and objectives;

- ☐ Improve utilisation by working towards understanding user healthcare seeking behaviour;
- ☐ Separate root causes from symptoms and enable more focused solution;
- ☐ Inform policy and decision making in tune with client needs.

Measuring and assessing the satisfaction attributes of different groups

- ☐ Will enable better framing or re-framing of decisions;
- ☐ Minimise decision outcomes working at cross-purposes;
- ☐ Offer insight into selective perception by various groups;
- ☐ Guide policy evolution in line with the various interests of stakeholders (clients).

Integrating satisfaction findings into policy frameworks may

- ☐ Ensure that findings and experiences are documented for future application;
- ☐ And enabling decision and policy client impact assessment prior to implementation.

The terms and terminology utilised in this thesis:

- ☐ Decision makers are defined as senior management, whether individuals or groups;
- ☐ The terms users and patients are used as synonyms;
- ☐ Staff is used to indicate all non-doctor healthcare facility personnel whether administrative, allied-medical or support;
- ☐ Medical doctors, physicians, doctors are the clinical care providers;
- ☐ The term “clients” is sometimes used to indicate the three groups: users, staff and medical doctors;
- ☐ Efficiency and effectiveness in decision-making is defined as achieving optimal desired outcomes given available resources, and with minimal trial and error;
- ☐ Sound Policy is defined as policy that promotes the goals and objectives of the organisation in both the strategic and operational day-to-day sense without being perceived as hindering the work of staff and medical doctors, and that is in harmony with client needs and expectations;
- ☐ Output is the measurable direct change resulting from a decision;

- ❑ Outcome (which outputs are intended to lead to) is synonymous with objective or desired target.

2 Study background

Patient satisfaction, health personnel job satisfaction, physician job satisfaction, quality of care systems, decision making, and policy development are all vital aspects to the success of any organisation. Much of the literature available on these topics tends to focus on them as separate entities. The linkages between these critical dimensions are not clearly articulated and understood.

Ambroise Pare, the father of surgery, defined the tasks of medicine in 1575: to cure sometimes, to comfort often, to console always. Clinical outcomes are solely concerned with the cure. It is the central role of healthcare management to support all aspects of medical and healthcare. However, the rise in interest in the viewpoint of patients is a recent development. Even the early attempts to assess the patient views were focused on “the need for compliance” (Szasz, 1956; Wilson, 1982). Today, user satisfaction data collection methods have evolved, but remain arguably expressive of the needs of providers and are collected often in alien terms to patients (Avis, 1995). The holistic view is overlooked, as decisions and policies are narrowly framed within the context of clinical care needs.

Sauerborn (1999) points, “in spite of frequent claims to the contrary, there is very little evidence that health systems research actually influences policy-making”. They argue that only if stakeholders' needs are taken into consideration during design and implementation of projects and dissemination of the results, research will have a chance to influence the policy process: an explicit link is made as to sound policy and user needs.

Donabedian (1980) divides the scope of healthcare into the science of care, the art of care, and the amenities (the surroundings). The patients are the best judges of the art of care and often the sole judge of the amenities (i.e. food, furnishings, colours, etc.). Health professionals are best suited to evaluate clinical care. Divergent points of view as to what defines a satisfactory outcome of a clinical episode often emerge between providers and recipients.

Healthcare managers intuitively know that decision outcomes affect a host of systems and people within an organisation. They also know that the needs and expectations of the various clients are different. The focus on user/patient satisfaction as an end in itself, over the past decade, has added complexity (and confusion) to healthcare management in that it has been argued that the plethora of activity in this field has not improved the quality of care. The overwhelmingly positive feedback coming from patient surveys has contributed in part to their dismissal as a tool to improve the quality of care (Vuori, 1991). A manager may not detect a problem to solve when presented with undifferentiated findings pointing to 80% and higher levels of satisfaction.

Has the measurement of patient satisfaction improved the quality of care? Vuori (1991) concludes that there is not enough evidence in the literature to support this. He argues that satisfaction has not been studied in how it impacts on the organisation and delivery systems, but rather from the perspective “Does patient satisfaction increase if those aspects of care believed to determine satisfaction improve?” He goes on to nevertheless stress the need to involve the patient as a partner in the process of care.

The literature is also been filled with attempts to better understand the concept of satisfaction, its attributes, and its predictors. Is satisfaction a dependent variable influenced by patient and service characteristics? Or is it an independent variable predictive of subsequent behaviour? (Linder-Pelz, 1982a).

Williams (1994a) addresses the validity of the concept of patient satisfaction: “through a review of past research findings, this paper suggests that patients may have a complex set of important and relevant beliefs which can be embodied in terms of expressions of satisfaction”. He points to the need to first understand how patients perceive and evaluate services. In this review of literature on the subject he also points to the fact that most quantitative measures of satisfaction tend to be high while qualitative ones reveal greater levels of disquiet: “the possibility exists therefore that the reductionism necessitated by quantitative methodology has rendered satisfaction results devoid of much of the meaning they were intended to embody”

Gustafson (1993) discusses the need to move from satisfaction measurement to needs assessment. The shift is not simply cosmetic, but reflects a re-orientation of focus on the user. Such a shift may indeed enable management to “discover” new dimensions and latent client needs. The Konica camera story in which the company researchers identified customer needs that later resulted in the development of auto-focus technology began by asking clients to simply tell stories of photo-taking experiences. Customer dissatisfaction was observed with frequently capturing out of focus images due to lack of time when photo opportunities present themselves. Can the use of such methods elicit latent patient and staff human needs to address the non-clinical components of care: components which are invariably affected by staff morale and productivity. Gustafson also describes the use of the “critical incident method” as a tool to explore customer needs.

Table 2-1: Comparison of customer satisfaction and needs assessment

Customer Satisfaction	Needs Assessment
How did you like us?	What did you need? (Focus on customer rather than hospital)
1. Responses typically positive	1. Asks questions users are qualified to answer
2. Guidance (or relevant info) for improvement limited	2. Identifies opportunities for new business
3. Natural to resist cross-organisational collaboration	3. Focuses on issues where cross-organisational collaboration would be easier

Source: Gustafson 1993, p 7

The debate over the “meaning” of satisfaction cannot be used to invalidate the need to assess patient views. After all they make decisions (rational or not) that influence success and failure of healthcare organisations and the very care they receive (non-compliance). User loyalty is a desired goal of any successful business, and healthcare provision has been strongly affected by the rise of consumerism and competition over the past 20 years. Various reform efforts in many nations have aimed at introducing market type reform into national healthcare systems (UK, Sweden). Market forces have been re-shaping healthcare facilities into buyer’s markets. This very transformation has compounded pressures on management to increasingly improve performance, attract skilled personnel, and attract more patients.

The exclusive focus on patient satisfaction or needs cannot adequately address managerial desires to optimise decision-making outcomes. Addressing the needs of one group (i.e. patients), may infringe on, or be perceived to infringe on, the needs of another equally important group (i.e. staff) and vice versa. The issues are further complicated by often observed senior management’s detachment from the day-to-day operations and consultation rooms: due to the size and nature of today’s healthcare facilities top executives often do not have the time interact with patients and most of the staff.

Given that patient satisfaction and staff (including doctor) job satisfaction have been documented (Cook, 1995; Makaram, 1995; Weaver, 1997) to play key roles in operational efficiency and clinical outcomes, integrating these elements into decisions and policies would make sound business sense.

Policy to some extent influences decisions; decisions have outputs and outcomes that in turn change something within an organisation. This change can impact the determinants of satisfaction, and therefore the satisfaction levels.

Figure 2-1: Policy, Decisions & Satisfaction lines of influence



This flow (figure 2.1) illustrates in a simple fashion the links between policies, decisions and satisfaction. However, these links are often indirect and other intervening variables may exist.

As management embarks on most decisions, the challenge lies in attempting to understand and communicate, in the pre-decision phase, how intended changes impact on satisfaction levels and relate those back to framing of decisions and current policy. And to assess, in the post-decision phase, observed client behaviour or decisions partly catalysed by the decision output or outcome. This impact is difficult to assess due to both its indirect nature and delay in observing its effects. Thus, within the day-to-day operations, it is often difficult to sort through cause and effect scenarios in an attempt to refine decisions.

Improved managerial efficiency and sound policy development are linked to the ability to analyse complex variables and synthesise solutions while being aware of the inter-linkages between people and systems. These tangible and intangible variables can include data on patient outcomes, satisfaction levels, financial details and quality improvement indicators. A senior manager or executive in a healthcare setting may typically be presented with a variety of reports and recommendations dealing with the above issues as separate entities. Problems exist simultaneously, and these issues compete for immediate attention, and are often interrelated (Isenberg, 1988). However the extent to which these indicators are integrated and related to one another is often left open to interpretation, intuition, and guess work.

Therefore, managerial decisions need to entail the following dimensions:

1. An assessment of the consequences on the various satisfaction levels of patients, doctors and other staff;
2. An assessment of how clients will perceive decisional output and outcome; how to best communicate decisions?
3. Framework guided in sound policy, client needs, and desired objectives;
4. Policy development in tune with client needs and expectations.

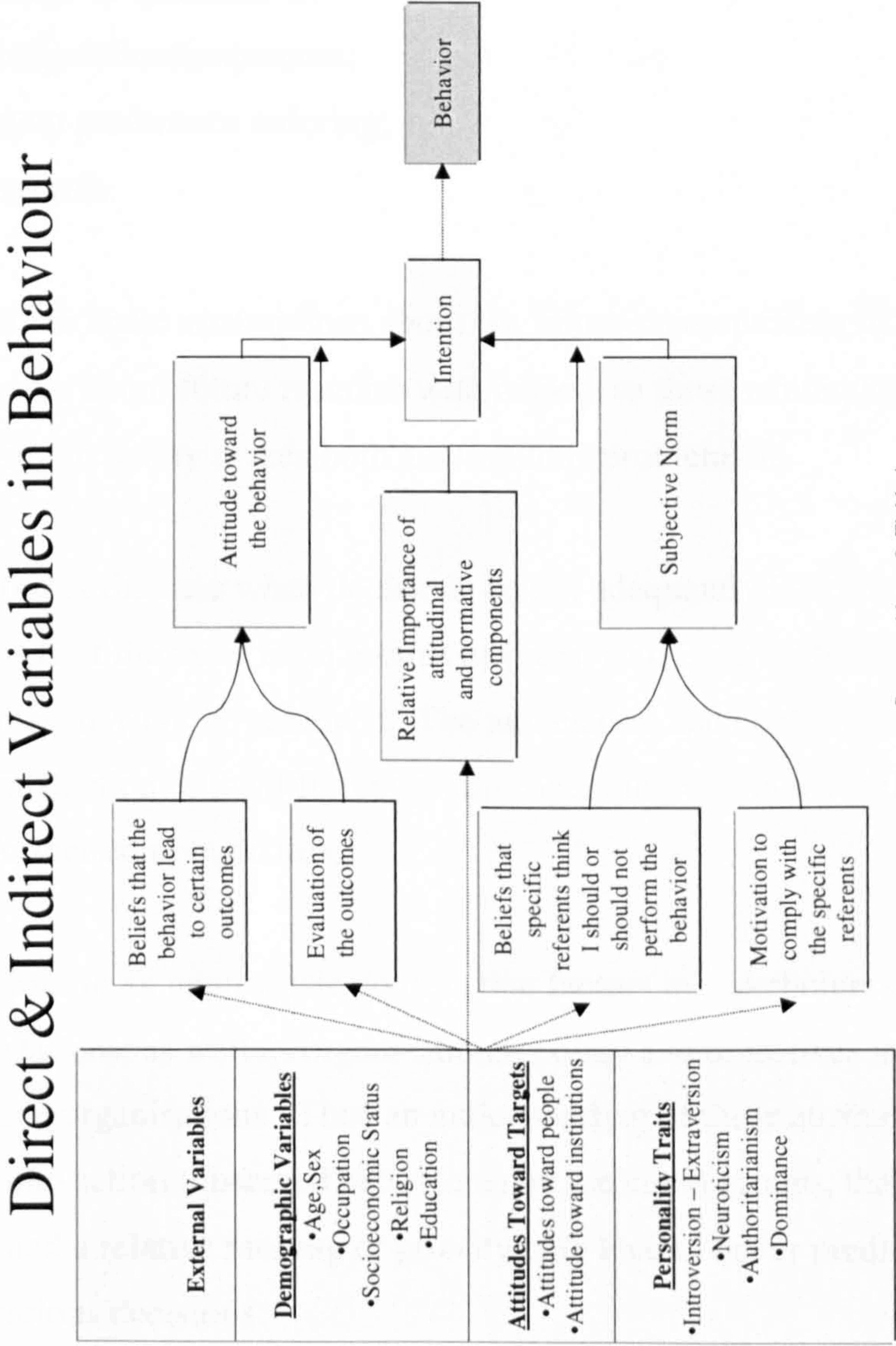
Or else the process of decision-making risks unforeseen negative outcomes.

2.1 *Decision-making*

Decision-making in the context of healthcare facilities is a continuous, dynamic, individual and culture specific, and a situational process involving many factors operating both at the conscious and subconscious levels. Decisions can be described as forms of behaviour with intention to arrive at some desired outcome (objective) through modification of specific outputs (usually tangibles). Decisions are also about re-enforcing, changing or modifying a status quo to achieve a desired outcome.

The clients of management are many: users, medical staff, non-medical staff, suppliers, creditors, debtors, etc. Many of those groups can be further sub-divided into subgroups with special interest and needs. The complexity in healthcare is compounded when the various operational systems are factored in. In addressing this complexity, managers constantly set priorities. These priorities are often dictated by the organisation's values, policies, management beliefs, past experience, the type of problem at hand, and personality traits (see figure 2.2 below, Ajzen & Fishbein, 1980). The process of priority setting may also be a well-defined one or simply an subconscious one.

Figure 2-2: Direct & Indirect Variables in Behaviour



Source: Ajzen & Fishbein,
Understanding Attitudes & Predicting Social Behavior, Page 84

Decisions are also about objectives. Again the process here may also be a well-defined one or simply an unconscious one. When decisions are made without the adequate framework or reference to a set of desired outcomes, managerial decisions risk working at cross-purposes. Standard theories of choice view decision making as intentional, consequential action based on four things: (March, 1982)

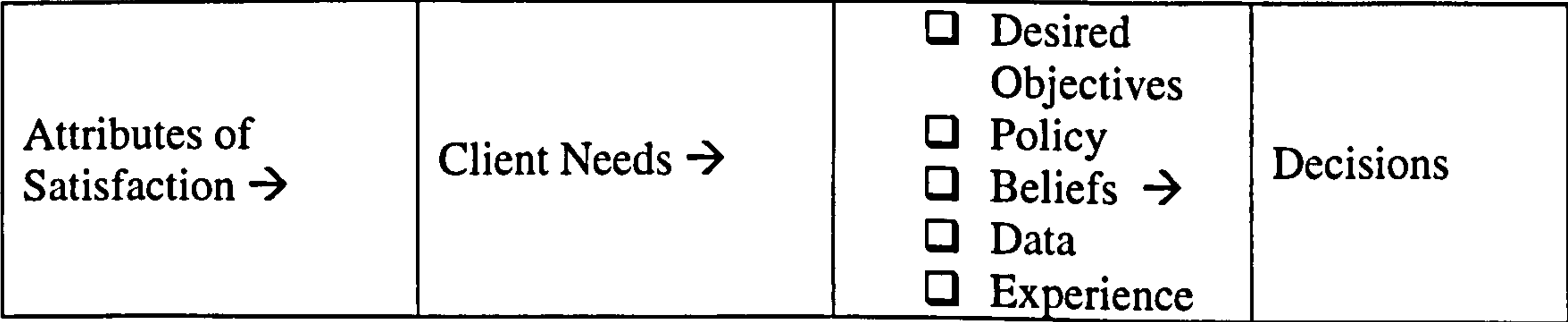
- 1. Knowledge of alternatives;
- 2. Knowledge of consequences;
- 3. Consistent preference ordering;
- 4. Decision rule.

Theories of choice make assumptions about the future consequences of decision output and a guess about future reaction with respect to those consequences. Decision-making in reality makes both assumptions problematic.

For example, this is the case when decisions do not adequately factor in the impact on satisfaction levels of the three main groups of users, staff, and medical doctors, the desired outcomes may not be achieved. The association and conflict of some attributes of satisfaction of the different groups operating within a healthcare organisation further compound this.

Framing decisions in an appropriate context that factors in stakeholders values, belief systems, expectations, as well as organisational policy and objectives may indeed lead to more effective organisations. Thus an understanding of these attributes, how they are translated into action (observed behaviour) by the client groups, their associations to each other, and a relative ranking of priority may lead to better predictions into the outcomes of various decisions.

Figure 2-3: Framing decisions and lines of influence



The various decision-making theories (see section 3.2) can perhaps explain the mechanics of a particular decision at a particular time, in a particular setting. It is plausible however that people operate in different modes under different circumstances when dealing with decision complexity: in high stress emergency settings, people act to satisfy an immediate objective without necessarily a thorough examination of all the options and all the consequences (satisficing theory), in other situations, in which longer term decisions are made, people may indeed be more rational and examine all alternatives (expected utility theory).

2.1.1 Impact on systems

Decisions often seek to modify existing operational procedures and processes: the change or immediate output. These may come in the form of technology acquisition, renovations, logical flow changes, hiring new staff, etc. Although such modifications are directed at the operational systems, they also indirectly impact people within an organisation. Thus, although the desired output may be observed and measured, the desired outcome, usually a longer-term objective, may or may not due to the interaction of other variables. In the example discussed earlier on managing an appointment system, the output may be directly observable in the form of an appointment log that shows patients scheduled at 20 minutes intervals. However, what may transpire in practice, as an outcome, is non-compliance to this log by the doctors: an observed non-quantifiable behaviour.

Even within a framework of long-term studied decisions, managers in healthcare often do not have the tools to adequately process available data and predict impact on the satisfaction levels of various groups due to the complexity of multi-attribute analysis, the multi-dimensionality of satisfaction, narrow framing of decisions, lack of appropriate policy, and influence of extraneous factors.

2.1.2 Impact on people

People within an organisation and users of its services constantly evaluate the environment and surroundings. Selective perception or the individualised social construct rooted in expectations and hopes (Plous, 1993) are at play: a unique, individual specific, group specific and culture specific phenomenon. Therefore,

people may not necessarily be evaluating the “real” objective change of a managerial decision, but their own interpretation of what this change means.

The decision brought about change may directly or indirectly impact on some known or unknown attribute(s) of satisfaction. As will be discussed later, attributes are reflections or expressions of needs, expectations, and preferences. Thus, they tend to influence human behaviour. The result brings about harmony or dissonance; and thus the expressions of satisfaction or dissatisfaction. These expressions are in turn transformed into intentions and decisions that are later expressed as behaviour that either conflicts with the intended outcome of the decision or supports it.

To summarise, perceptions of the changes brought about by management decisions, will impact on satisfaction levels and may result in behaviour modification in one of three ways

1. Supportive of desired outcome;
2. Opposed to desired outcome;
3. Not linked to desired outcome.

In turn, the client behaviour modification (reaction) may be processed and directly or indirectly perceived by management as information, experience, and through other indicator(s). It may re-enforce existing decision-making frameworks, change them, and may result in policy modifications or development, etc.

The complexity of the scenario above lies in some of the conflicting interests associated with patients, doctors, and staff. It is therefore useful to isolate those attributes of satisfaction that are known to be in conflict (opposing) amongst the various groups, and to also isolate those that are common, and unique. It follows that decisions impacting positively on common attributes will generally have a higher probability for success, than those in the opposing category.

2.2 Policy frameworks

When making decisions, managers communicate meaning about what is important, what is happening in the internal and external environment, desired behaviour, etc: they shape the organisational culture and formulate policy overtly or covertly.

Observations in studies (March, 1982) of management practices have shown decision makers to:

- ☐ Gather information and ignore it;
- ☐ Operate in a surveillance mode more than a problem solving mode;
- ☐ Do not resolve problems, but apply rules and copy solutions of others.

Sound policy is often a key factor in the framework that guides effective and efficient decisions. It filters a lot of the guesswork and searching for alternatives, ensures concord with strategic goals and objectives, and provides an overall context for systems and people. Policy is both a reflection of organisational values and beliefs, as well as the its culture. It is may be static or dynamic, and often is a direct reflection of the overall goals and objectives.

A key requirement for the evolutionary process in policy making is a written record of achievement, or otherwise the process would be doomed to repeat finding solutions to problems already solved.

Although policies may not be written up formally in a single policy document, they are represented in a collection of guidelines, regulations, procedure manuals, and legislation governing the type and quality of care provided. The more developed and communicated policy is throughout the organisation, more clarity is achieved at the operational level, and less ad hoc decision-making is required.

However, effective policies and policy development must be congruent with and reflective of patient, staff, and medical doctor beliefs and values; otherwise, the organisation risks impacting negatively the satisfaction of these groups, and therefore invoke behaviour counter to organisational objectives: a state of dissonance.

Experience has also shown that even the best-intentioned policies may risk failure if

perceived incorrectly by patients, staff and doctors: a state of discord emerges resulting from a process of selective perception.

In the absence of policy, ad hoc decisions ensue. This mode of decision making, defined as one that may not reflect or be rooted in organisational policy may precipitate outcomes that work at cross purposes to desired objectives.

Managers may not realise the impact of ad hoc decisions, until the consequences reflect themselves, usually within systems and/or levels not immediately evident. For example, a decision to save money by switching to a cheaper brand of sutures, may lower the efficacy of care (or be perceived to do so), and thus compromise the outcomes of clinical procedures. Managers, working within the context of healthcare facilities tend to spend their time processing administrative-financial transactions, dealing with personnel and clients that may have business at that level. Thus, a manager's social construct or reality reflects those issues, priorities and people needs. Figure 2.4 illustrates, perhaps in a simplistic manner, the physical parts of the healthcare organisation in which various clients and managers tend to spend most of their time. Unless the manager is a practising clinician as well, she risks isolation from the core functions that represent the organisation.

Quadrant one represents managerial functions and environment that are invisible to users, most clinical staff, and most non-clinical support staff. This is the space and reality in which most decisions are made, meetings take place, deals are concluded, etc.

Quadrant two represents the visible (from patient viewpoint) administrative side for patient/user processing and functions. This is the space and reality in which users interact with non-clinical staff for processing administrative and financial matters, appointments, logistics, etc.

Quadrant three represents the visible (from patient viewpoint) clinical side for patient/user processing. In this context most consultations, day visits, diagnostic procedures, in-room hospital care, etc. take place.

Quadrant four represents the invisible (from patient viewpoint) clinical side. This is where surgeries, lab tests, doctor-doctor consultations, etc take place.

Key groups within the healthcare facility have their perceptions of reality shaped in one or more of these quadrants. Very few, if any, of the personnel and management “see” the totality of the organisation.

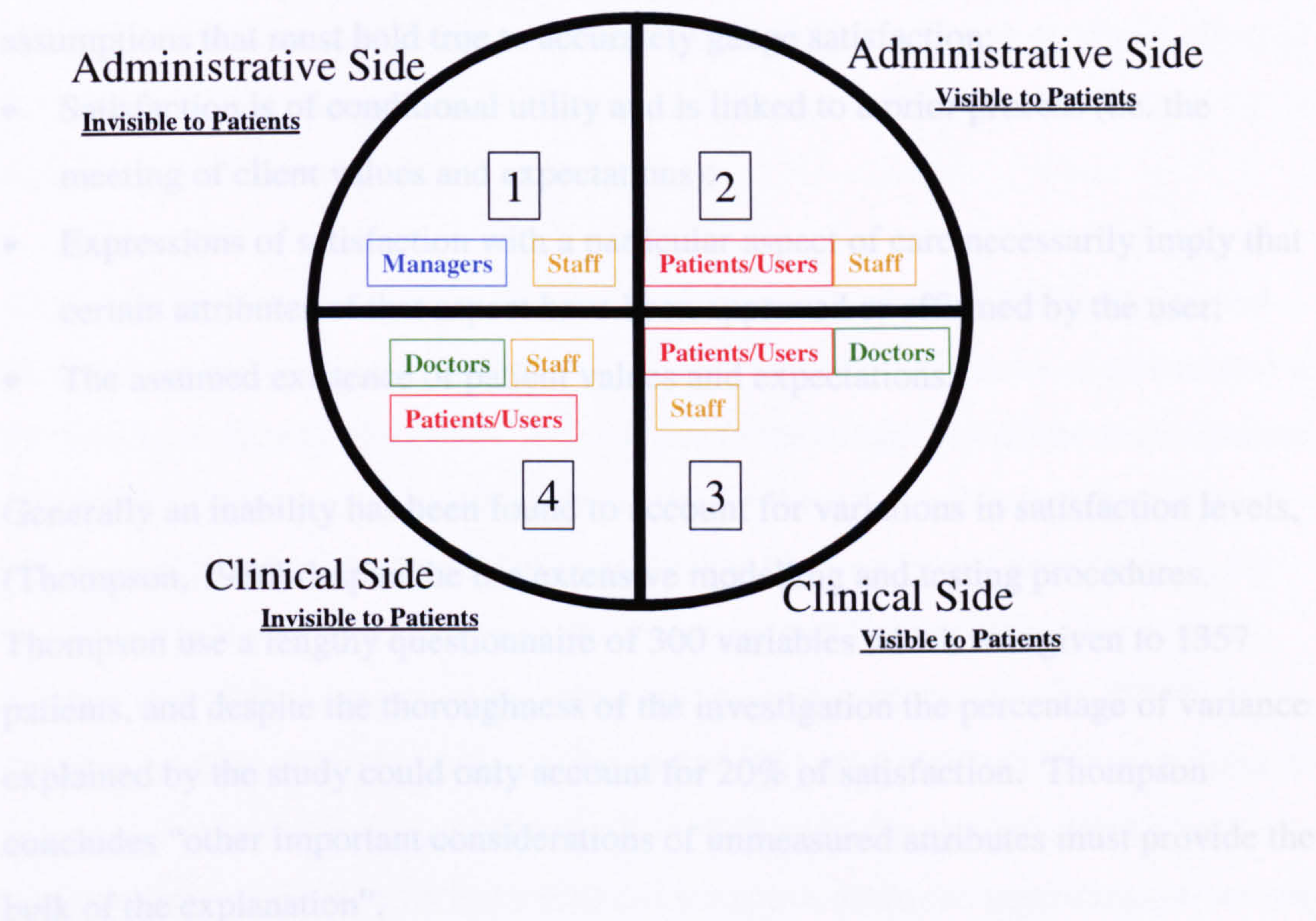
Additionally, the external interactions, referrals, professional consultations are different for each quadrant.

The entire picture is of course also immersed in the external political, economic, social, technological, legal, and environmental (PESTEL) realities. This reality introduces variables that influence all individuals and systems.

Dissonance within the healthcare facility between management and the various client groups, or within the client groups can be envisioned as a break-up of the circle that is the organisation. The pieces of the pie are separated and no longer reflect a coherent and unified organisation with direction. Such a break-up may be experienced by those involved in the presence of territorial boundaries, excessive bureaucratic processing, delayed implementation of decisions, non-compliance, break-down in communications, reduced morale, selective application of policy, and perhaps worst of all, a deterioration of clinical care. In contrast sound policy accounting for client needs and expectations may act to preserve the integrity of the organisation (the circle).

Figure 2-4: The social construct for patients, doctors and staff

The Social Construct for Patients, Doctors & Staff



2.3 Patient satisfaction

Patient satisfaction monitoring had its origins in the 1950s (Szasz, 1956) and was viewed largely in relations to improving user compliance with doctors’ orders: taking medications, behaviour, and appointment keeping. Thus it was viewed as an essential component to ensure a higher quality clinical outcome: the patient perspective was legitimised from the viewpoint that it was necessary for compliance.

Such measurements may bring patient views and perceptions to management, but

The 1960s and 70s witnessed a wide scale growth in consumerism. This led to the view that satisfaction in itself to be viewed as a desired outcome of care and not solely a means to improving compliance.

The rise in satisfaction surveys since the 1980s has been rooted in the desire for greater accountability of health professionals which in part was a product of the rise in consumerism, and the desire to gauge efficiency more accurately in a service sector industry demanding ever increasing resources. (Williams, 1994a)

Satisfaction has best been defined (Linder-Pelz, 1982; Fishbein & Ajzen, 1975) as an expression of a favourable attitude towards an object or event. Thus, as an attitude it cannot be directly observed, but is usually monitored through responses to questions that comprise the dimensions of satisfaction. This monitoring process makes assumptions that must hold true to accurately gauge satisfaction:

- Satisfaction is of conditional utility and is linked to a prior process (i.e. the meeting of client values and expectations);
- Expressions of satisfaction with a particular aspect of care necessarily imply that certain attributes of that aspect have been approved or affirmed by the user;
- The assumed existence of patient values and expectations.

Generally an inability has been found to account for variations in satisfaction levels, (Thompson, 1986) despite the use extensive modelling and testing procedures. Thompson use a lengthy questionnaire of 300 variables which was given to 1357 patients, and despite the thoroughness of the investigation the percentage of variance explained by the study could only account for 20% of satisfaction. Thompson concludes “other important considerations of unmeasured attributes must provide the bulk of the explanation”.

The conceptual framework derived from patient satisfaction research provides only partial and sometimes misleading insights into the perspectives of the patients studied. (Williams, 1994a). The implications are that patients often do not evaluate in terms of being “satisfied”.

Such measurements may bring patient views and perceptions to management, but when not adequately understood, they also risk denying patients the opportunity to have their opinions included (Avis, 1995) in planning and evaluation of health services.

While there has been evidence suggesting user expectations and values are involved in evaluations of satisfaction, they do not appear to be related in any simplistic fashion.

Linder-Pelz (1982b), exploring doctor-patient encounters, tested the hypothesis based on the Fishbein and Ajzen (1975) theory that attitude are determined by the interaction of beliefs (expectations) and valuations (values) and found no support for that theory. They found that expectations consistently explained most (but only 8% to 10%) of the variance in satisfaction ratings; particularly they noted the direct effect of prior expectations of the doctor's conduct on subsequent satisfaction with that dimension of care received.

It is important to note however, that this study focused solely on the doctor-patient encounter and may have missed other key aspects of user valuations of care related to the facility, staff, and operations. Indeed, due to the complexity of the doctor-patient relationship, patients may be reluctant to criticise the doctor, always expressing satisfaction in formal studies. Moreover, studies have noted this complexity in the doctors' role of patient advocacy in which doctors falsified records to assist their patients in seeking diagnostic procedures and insurance claims (Wynia, 2000). Thirty-nine percent (39%) of physicians in this USA study utilised tactics to assist patients by manipulating medical records through changing the patient's billing diagnosis, reporting symptoms patients did not show, and/or exaggerating the severity of illness.

Various studies have looked at user satisfaction differently: (Baker, 1990):

- Component of quality in clinical care;
- An outcome of a clinical episode;
- Contributor to clinical outcomes;
- Manner users judge clinical care.

As a component of quality, satisfaction is seen as an additional dimension to quality indicators. Over the past two decades, an emerging view has become a norm: where it is no longer sufficient to define in tangible measurable ratios and numbers the subjective patient perception of care. "Satisfaction could be included in quality assurance assessment as...an attribute of quality care: as a legitimate and desired outcome. Put simply, care cannot be of high quality unless the patient is satisfied" (Vuori, 1991)

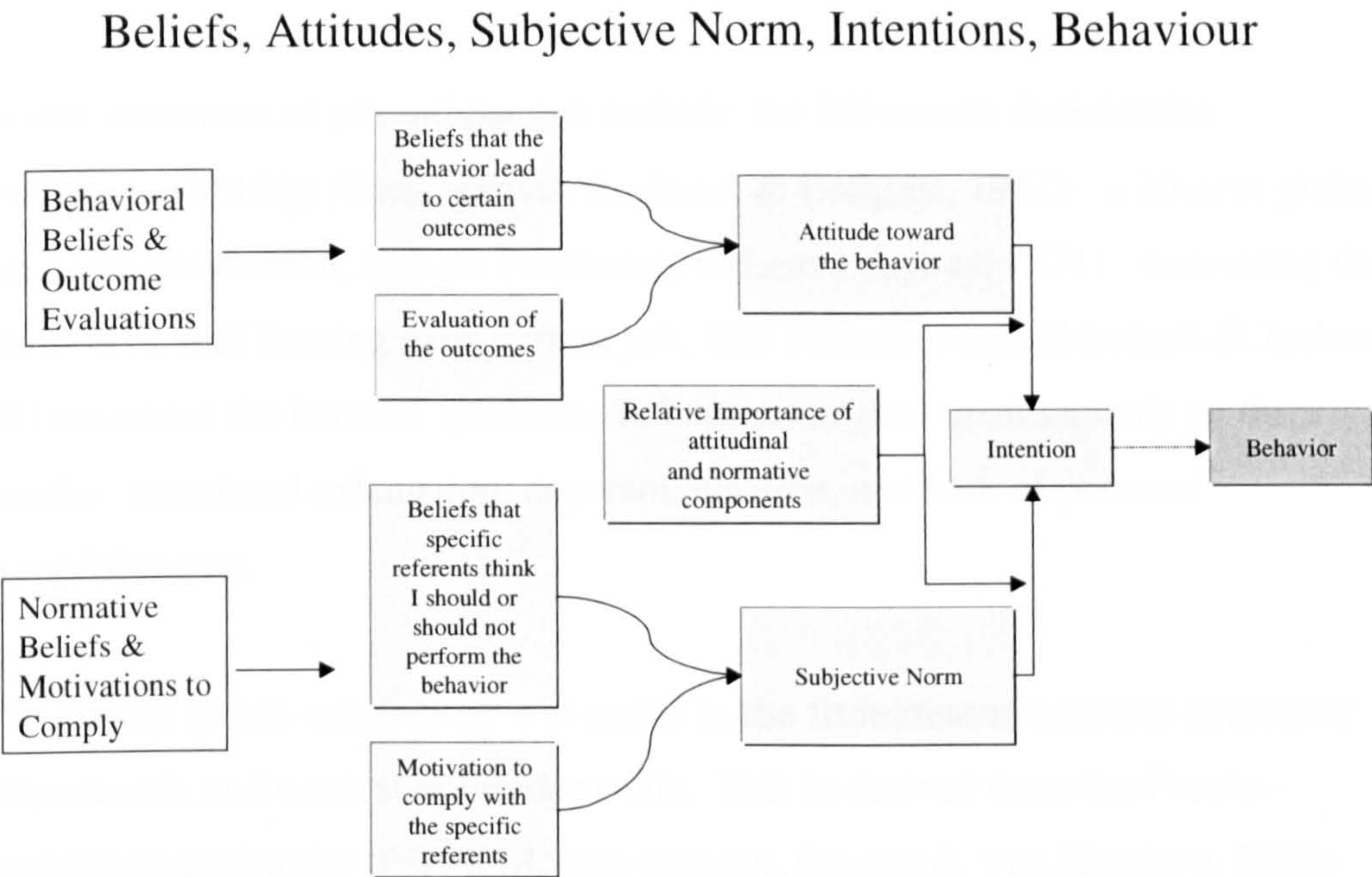
As an outcome of care, satisfaction is seen as a necessary consequence of a clinical episode, since the process entails treatment of not merely a disease, but a living entity.

As a contributor to care, satisfaction is viewed as essential for maximal patient compliance with doctors' orders and prescribed therapy. "Patient satisfaction may be considered to be an element in health status itself" (Donabedian, 1988)

And finally, as a way in which users judge care, satisfaction is a subjective quality through which users decide and judge a medical facility or practitioner. This judgement is usually not rooted in technical or clinical know how, but through a user's set of expectations, needs and wants.

Satisfaction has been defined as an attitude towards an object (Fishbein & Ajzen, 1975). This theory holds that satisfaction is a favourable or unfavourable orientation towards an object and is related to beliefs a person holds about attributes linked to that object. This theory distinguishes beliefs, attitudes, intentions and behaviours (figure 2.5). Thus the attitude (of satisfaction) can only be observed through behaviour or expression, and is affected by beliefs.

Figure 2-5: Beliefs, attitudes, intentions, & behaviour



Source: Ajzen & Fishbein, Understanding Attitudes & Predicting Social Behavior, Page 100

Patient satisfaction may influence utilisation, compliance, and clinical outcomes: Patients, as recipients of care, are a key player in assessing the quality and efficacy of care. Although, most are not in a position to judge the care on clinical merit, a host of proxy indicators are employed by users to “judge”. Their opinions, expressed in terms of satisfaction or dissatisfaction, influence a host of elements ranging from compliance with doctors orders, intention to return, utilisation, their self perception of own health status, etc.

2.4 Job satisfaction

A variety of tools are in use to measure and monitor job satisfaction. Much of the literature has been focused on nursing. However, over the past ten years, a number of studies have addressed physician job satisfaction as well.

The tools include work environment measures such as the Quality of Work Life (QWL-C) (Sashkin & Lengermann, 1987) which measures satisfaction with conditions of work, and the Index of Organisational Reactions (IOR) (Smith, 1976): which focuses on employee satisfaction with eight specific aspects: supervision,

hospital identification, type of work, amount of work, co-workers, physical conditions, financial rewards and career future.

Outcome measures of job satisfaction include, the Minnesota Satisfaction Questionnaire (MSQ) (Weis, Dawis, England, & Lofquist, 1967): a 20 item global measure of satisfaction, and the Propensity to Leave (Lyons, 1971): measuring the likelihood of staff leaving their current job. The Burnout Scale (Maslach & Jackson, 1981) measures the burnout syndrome in human services professionals on three subscales: emotional exhaustion, depersonalisation, and lack of personal accomplishments.

Higher levels of job satisfaction will occur as the fit increases between employee abilities/needs and work supplier/demands. This is derived from the Person-Environment Fit Model (PE Fit Model) (French, Caplan & Van Harrison, 1982)

Irvine and Evans (1995) looked at casual relationships among job satisfaction, behavioural intentions, and nurse turnover behaviour. They reported that job characteristics such as routinization, autonomy, and role conflict, and characteristics of the work environment such as supervisory relations, leadership, and stress were all related to job satisfaction. They also pointed that work content and work environment variables had a stronger relationship with job satisfaction than economic or individual difference variables.

Al-Ma'aitah (1989) study of Jordanian nurses appears to support North American findings regarding issue of nursing work life; in examining the role of psychosocial factors in the decision of Jordanian baccalaureate nurse to remain in or leave the profession, the dominant factors reported included personal beliefs about having a good position, satisfaction with communicating with people, feeling confident, having more time for their own goal and plans, having more time for social life, feeling fulfilled, and being burdened with responsibilities.

Similarly, Yamashita (1995) studying job satisfaction in Japanese nurses found the following factors correlated highly with job satisfaction: interpersonal relationships, autonomy, promotion, and administration. The Administration factor included

questions on working conditions, salary, regulations, rules, and enough time to deliver patient care.

Job dissatisfaction has been associated with increased reporting of on the job stress by health workers (Al-Ma’aitah, 1999; Yamashita, 1995). Doctor dissatisfaction with organisational and care aspects have been shown to lower morale and productivity. Such states of clinical provision may negatively impact clinical decision-making and follow up, and also impact negatively on patient satisfaction.

Medical doctors and other staff usually control the use and allocation of resources with a healthcare organisation. When organisational policy and doctors’ beliefs are not synchronous, the resulting dissonance will lead to internal conflict. Doctors have been shown to side with patients when such conflict arises. Although many organisations have set regulations, employ methods, and offer incentives to ensure doctor compliance with overall policy, the resulting situation may still impact negatively on patients, organisational image and service utilisation patterns.

Figure 2-6: Doctors’ satisfaction & productivity

MD Satisfaction→	MD Morale→	Productivity→	Output→	Clinical Outcomes→	Patient Satisfaction→	Desired Management Objectives
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Staff also control resources, influence the image of the organisation, and their performance will influence both patient and doctor satisfaction. Moreover, allied medical professionals also control resources within a healthcare organisation. Their actions influence operational efficiency, clinical outcomes, and the image of the facility.

2.5 Integrating satisfaction findings into decision-making and policy development

Integrating and accounting for predictors of satisfaction into policy and decisions may lower the risk alienating clients. By explicitly addressing attributes and predictors of satisfaction, decision processes gain value from this added vital dimension. Indeed some managers do attempt this with varying degrees of success.

If satisfaction is an “attitude” or evaluative judgement defined by a set of beliefs, then management both influences and is influenced by those beliefs. Additionally, decision makers may want to influence those beliefs in manner consistent with defined decision objectives. Perceptions and expectations are types of beliefs. Thus influencing those will invariably influence satisfaction (the attitude). The attitude is observed through some type of subsequent behaviour. Therefore, management needs to also know what to look for as an associated behaviour(s). It follows then that both policy and decisions must be at least partly re-framed in

1. Information about client expectations (i.e. beliefs);
2. Desired attitude change or modification (i.e. satisfaction);
3. Expected or predicted behaviour (i.e. decisions).

Research has consistently shown that user expectations account for some observed satisfaction variations (Linder-Pelz, 1982a). Thus influencing those expectations (beliefs) will directly impact on satisfaction. Beliefs in turn are partly functions of individual and/or societal value systems that management does not often factor into daily decision-making.

2.6 The managerial context

From the discussion above, healthcare management emerges as a complex art and science involving decision-making, policy development, and crisis management on a daily basis. Decisions impact a variety of stakeholders and users, as well as systems and operations. Managers make decisions that are often rooted in local culture, organisational policy, past experience, available information and intuition.

Given, the plethora of literature on the subject and variety of definitions and models attempting to explain the concept of satisfaction, the subject must be approached from a pragmatic angle as viewed by management in healthcare looking at both:

- How to best incorporate satisfaction-monitoring data into policy development and daily decision-making?
- And, the impact of sound policy and/or daily decision-making on client satisfaction.

The difficulty in achieving the above lies in management's concerns with delivering tangible output on a day-to-day basis. The reality and mental frame work of a typical manager is in addressing the daily crisis arising from users, staff, suppliers, systems and equipment. It is often difficult, due to time constraints, to assess and address problems through studied options. Most tend to go with intuition, past experience, current policy and usually, at a subconscious level, one's value system. Thus, trial and error end up to be the method of choice, and those with more experience are said to have developed or acquired "wisdom".

Satisfaction is a positive evaluative judgement towards some perceived experience or change. It can also be described as an expression of a favourable attitude towards an object or event. It may be a satisfaction with a particular experience, event or overall satisfaction (global).

Job satisfaction (section 2.4) will influence performance, productivity clinical outcomes and quality. Satisfaction is a desired outcome of vital importance in clinical settings; for doctor and patient satisfaction levels may directly impact the result of patient encounters.

The figure below (figure 2.7) encapsulates the managerial context from the decision-making viewpoint. All systems, sub-systems, client needs, policy are inter-connected. Re-framing decision and policy processes to recognise the centrality of client needs, expectations and satisfaction may lead to more effective organisations.

Management Context: Two-Way feedback within
health care facilities

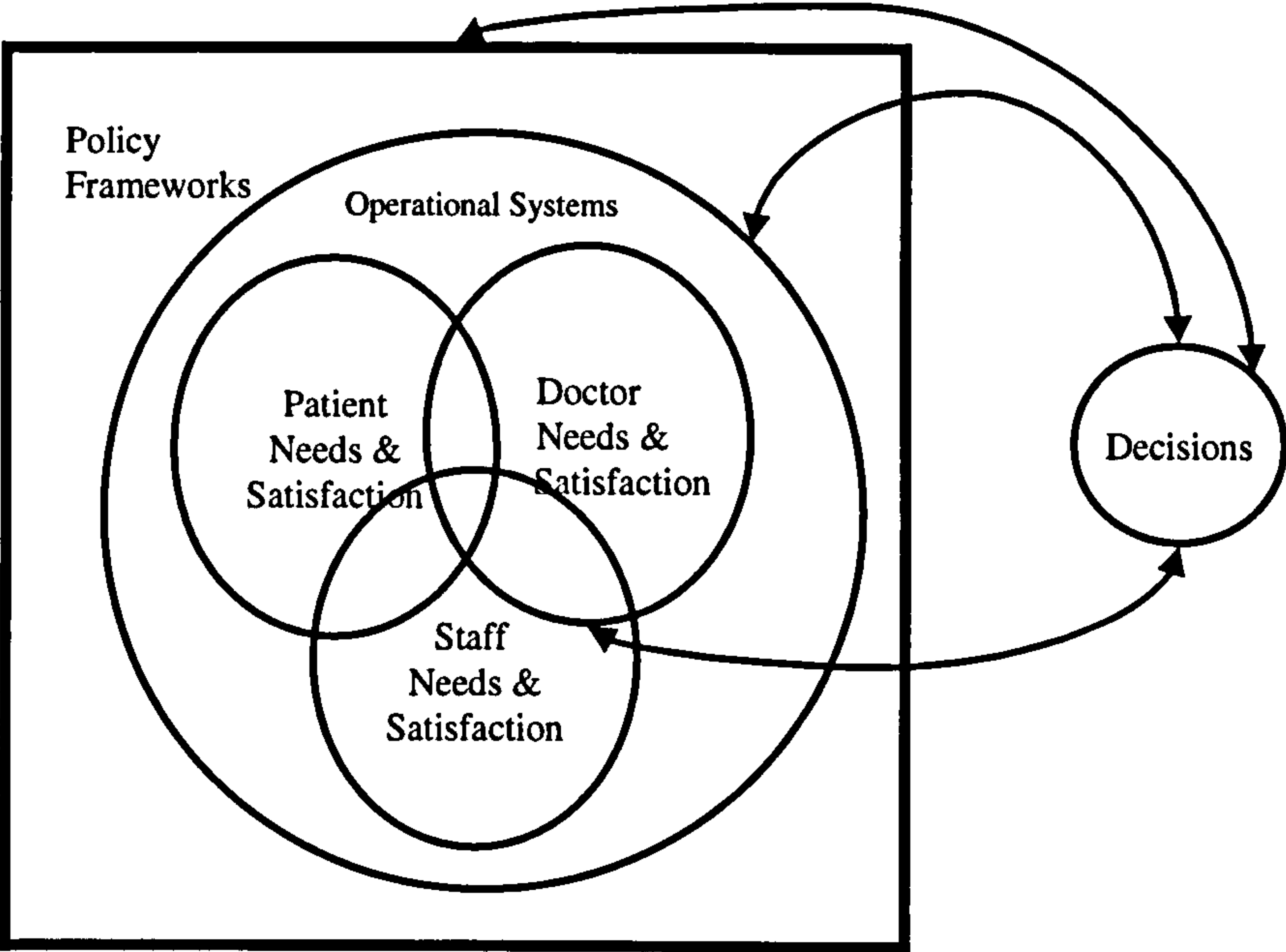


Figure 2-7: Management Context

3 Satisfaction & decision theories literature review

3.1 Satisfaction theories and measurement

The literature abounds with studies and theories that attempt to understand the concept of satisfaction. The past decade has seen a proliferation of surveys trying to “measure” user satisfaction and enumerate this in statistical reports. Locker and Dunt (1978) noted that the preoccupation of most researchers has been with identifying socio-demographic correlations of satisfaction, rather than the development of a socio-psychological theory; several studies have been conducted to investigate precisely how patients evaluate. Pascoe (1983) has reviewed the majority of models noting that expectations and values appear to be of central importance.

The four key models that have attempted to explore and explain satisfaction are:

- Value-expectancy
- Fulfilment theory
- Discrepancy theory
- Equity theory

Additionally, many authors have examined the relevance of satisfaction measurements to the quality of care (Vuori, 1991). “Does the measurement of satisfaction improve care?” Vuori, arriving at a conclusion that “we do not know”, addressed this central question and points to the lack of evidence as being attributed to four factors:

- ❑ The lack of clear study objectives: most studies concern themselves with overall patient satisfaction, others look at correlations between satisfaction and other quality indicators, while very few studies have used a before-after design to see what happens to the level of quality after patient satisfaction has been measured;
- ❑ Assessment being too general and therefore masking varying levels of opinions and different aspects of care. Thus general findings are difficult to interpret and cannot suggest specific improvements;

- ❑ The separation of satisfaction studies from quality assurance programmes thus severing the links between quality improvements and patient satisfaction;
- ❑ Difficulties in interpretation of the results. In comparing hospital and primary care patients in Finland (Vuori, 1972), a high level of satisfaction was observed, but with perplexing differences: The hospital patients took technical competence for granted and detected defects in the behavioural aspects of care and in communications. The patients in general practice took empathy for granted, but were slightly suspicious about the technical quality.

3.1.1 Value-expectancy models

The value-expectancy theory (Fishbein & Ajzen 1975; Linder-Pelz, 1982b) holds that patient satisfaction is a positive attitude, which is related to both user beliefs that the care possesses certain attributes and the user evaluation of those attributes:

$$\text{Attitude} = \sum B_i * E_i$$

(B= belief strength, i= attributes, E= measures of evaluation)

Attributes can be seen as distinct dimensions of care (access, cost, convenience, etc). Thus satisfaction is based on two pieces of information: belief strength and evaluations of dimensions of care.

According to Tolman (1932), people learn “expectations”, i.e., beliefs that a given response will be followed by some event. Since these “events” could be either positive or negative “reinforcers”, then people would learn to perform behaviour that they “expected” to lead to positively valenced events.

The best-known expectancy-value model is the subjective expected utility model of behavioural decision theory. According to this model, when a person has to make a behavioural choice, s/he will select that alternative which has the highest subjective expected utility (SEU).

This theory was tested in a primary care setting by Linder-Pelz (1982b), and found little support in explaining satisfaction. She noted “Expectations consistently

explained most of the variance in satisfaction ratings; particularly noteworthy was the direct effect of prior expectations of the doctor's conduct on subsequent satisfaction with that dimension of the care received. Values had little independent effect on satisfaction, and the combination of values and expectations (their interaction) was unrelated to satisfaction."

3.1.2 Alternate theories

Discrepancy theory (Fox, 1981) describes satisfaction as the perceived (not necessarily actual) discrepancy between what an individual desires and what occurs. Authors vary in their meaning of "desires"; some treat the latter as "expectations", others as what is "important" and some as what "should be". The result is expressed as a ratio. Many satisfaction studies use this theory implicitly.

Fulfilment theory (Noyes, 1974) defines satisfaction in similar terms to discrepancy theory, but it differs in that it measure the simple difference (as opposed to the ratio) between what occurs and what should or was desired.

Equity theory (Lawler, 1973) holds that satisfaction is a perceived equity or balance of inputs and outputs. Further, the theory stresses the importance of evaluating one's own balance with others balances. It therefore introduces the role of social comparison processes.

3.1.3 Satisfaction and expectations

Recent studies point to the fact that expectations consistently explain most of the variance in satisfaction ratings. The Linder-Pelz study (1982b) noted the direct effect of prior expectations of the doctor's conduct on subsequent satisfaction with that dimension of care. It suggests that patients are likely to express satisfaction no matter what care the doctor gives. Expectations appear to influence satisfaction independently.

This suggests that evaluations of care may have little to do with satisfaction.

Williams (1994a) suggests that this undermines the assumed meaning and utility of expressions of satisfaction; for such a conclusion indicates that user satisfaction may originate outside the healthcare system. This is a possibility that has already been

recognised within satisfaction studies with social services (Shaw, 1984). In a review of the subject, Shaw makes the following point:

“Client evaluations are...relative to context, to knowledge of services, to expectations, to help received in past encounters, to help received from other services, to perceptions of the ‘pleasantness’ of the social worker...Unless such factors are taken into account, we can never be sure whether the high rate of client satisfaction is related more to factors like knowledge or limited expectations, than the actual helpfulness of the social service contact”.

3.1.4 Status quo

Studies to test the above models (Linder-Pelz 1982a) have reported a general mis-fit between attributes of satisfaction and observed results, concluding “other unmeasured considerations from the set of unmeasured attributes must provide the bulk of the explanation” (Thompson, 1986)

Brian Williams (1994a) through a review of past research findings suggests, “patients may have a complex set of important and relevant beliefs which cannot be embodied in terms of expressions of satisfaction. He proposes more community research into the ways and terms in which those patients perceive and evaluate that service. Also Williams (1994a) states that

“Repeatedly when qualitative methodology is utilised, little if any support is found for believing that patients think and evaluate in terms of a continuum of satisfaction...patients often display a critical nature when given the opportunity, through more open ended questions, to express themselves in their own terms. Consequently, quantitatively measured expressions of satisfaction tend to be high, while qualitative reports reveal greater levels of disquiet. The possibility exists therefore that the reductionism necessitated by quantitative methodology has rendered satisfaction results devoid of much of the meaning they were intended to embody.”

Avis (1994) advocates “a more participative and qualitative” form of service evaluation: to avoid treating service users as sources of data, and to lead to improvements in care that are more fully grounded in patients’ expressed values and aspirations.

Calnan (1988) proposes a model for the lay evaluation of healthcare that moves away from satisfaction and which suggests that patients’ evaluations of care are influenced by four elements: their purposes in seeking professional assistance, their level of

previous experience with health services, their perceptions of the socio-political values on which the healthcare systems is based, and their personal images of health.

3.2 *Decision-making theories*

Decision-making theories have evolved over the past decades in attempts to understand, predict and modify human behaviour. Various disciplines have contributed to decision-making models. Mathematicians and economists often offer models of how people “should” make decisions in a rational manner; the normative models. Psychologists tend to focus on understanding how people “do” make decisions (rational or not); the descriptive models. The operational scientists or methodologists tend focus on “How do you improve the quality of decisions in practice?” (Bell, Raiffa & Tversky, 1988): the prescriptive models. Attitudes, opinions and choices are often surprisingly elastic. In many cases, the wording of a question can influence significantly answers people give. (McNeil, 1988)

What follows is a brief overview of the various models attempting to explain decision-making. (Plous, 1993)

3.2.1 Rational decision-making

March (1994) proposes that the most common depiction of decision makers is that of a rational and calculating process; such theories stipulate that decision-making mechanisms are both consequence and preference based. A rational procedure is one that pursues logic of consequence. It makes a choice conditional on the answers to four basic questions:

- ☐ The question of alternatives: What actions are possible?
- ☐ The question of expectations: What are the future consequences for each alternative?
- ☐ The question of preferences: How valuable to the decision maker are the consequences associated with each of the alternatives?
- ☐ The question of the decision rule: How is a choice to be made among the alternatives in terms of the values of their consequences?

However in the real world, not all choices are evident, not all alternatives are considered, and all consequences are known. Thus evolved the theory of limited or bounded rationality. The decision rules used by real decision makers appear to differ from decision theory. Instead of considering “expected values” or “risk”, decision makers invent other criteria. Instead of optimising, they seek the “good enough”.

3.2.2 Expected utility theory

Expected utility theory falls in the category of normative (how people should behave) theories. It is now a family of theories based on what was originally proposed by Von Neumann and Morgenstern (1947).

Typically decision makers are assumed to have complete knowledge and information about the alternatives and consequences. This theory also assumes decision makers understand this information and that they are able to implicitly or explicitly calculate the advantages and disadvantages of each alternative. Finally, the theory hypothesises that decision makers compare these calculations and choose the course of action that maximises expected utility. Thus this theory proposes that people optimise.

This theory holds the following axioms:

- ❑ Rational decision makers should be able to order any two alternatives;
- ❑ Rational actors should never adopt strategies that are “dominated” by other strategies (adopting a strategy is here equivalent to making a decision). For example, when deciding on a new car purchase, Car A strongly dominates Car B if it is superior in mileage, cost and looks, and is weakly dominant if it gets better mileage than Car B but is equivalent in cost and looks. According to expected utility theory, perfectly rational decision makers should never choose a dominated strategy, even if the strategy is only weakly dominated;
- ❑ Cancellation principle: holds that when choosing between two risky alternatives with equally probable outcomes among the possible consequences, then the utility of these outcomes should be ignored in choosing between the two options;
- ❑ Transitivity: if a rational decision maker prefers outcome A to B, and outcome B to C, then that person should prefer outcome A to C;

- ❑ Continuity: For any set of outcomes, a decision maker should always prefer a gamble between the best and worst outcome to a sure intermediate outcome if the odds of the best outcome are good enough;
- ❑ Invariance: this stipulates that a decision maker should not be affected by the way alternatives are presented.

Von Neumann and Morgenstern (1947) proved mathematically that when decision makers violate any of the above principles or axioms, expected utility is not maximised. Variations and extensions of this theory have been proposed. For example, Luce (1959) developed what they call “stochastic” model of choice – models that treat preferences as though they have a random component.

3.2.3 Satisficing theory

This falls in the category of descriptive theories (how people do in reality decide). Therefore this theory factors in what is known as the “nature” of human beings; memory is biased, perception is selective, alternatives are missing or uncertain. Simon (1956) proposed that people “satisfice” rather than optimise when they make decisions. To satisfice, is to choose a path that meets one’s most important needs, even though the choice may not be ideal or optimal. For example, in searching for solutions, rarely do people conduct an exhaustive search of all possible options, scenarios and outcomes. As Simon wrote (1956): “However adaptive the behaviour of organisms in learning and choice situations, this adaptiveness falls far short of the ideal of ‘maximising’ in economic theory. Evidently, organisms adapt well enough to ‘satisfice’; they do not, in general, ‘optimise’”

3.2.4 Prospect theory

Prospect theory (Kahneman & Tversky, 1979) replaces the idea of utility with “value”. Utility is defined in terms of net worth; value is defined in terms of gains or losses. The value function for losses is convex and relatively steep. In contrast the value function for gains is concave and not so steep. Because the value function for losses is steeper, losses “loom larger” than gains.

This asymmetry or loss aversion for example may complicate bargaining and negotiation because each party may view its own concessions as losses that loom larger than the gains achieved by the concessions of the adversary.

This theory predicts that preference will depend on how a problem is framed. If the reference point is defined such that an outcome is viewed as a gain, the resulting value function will be concave and decision maker will tend to be risk averse. On the other hand, if the reference point is defined such that an outcome is viewed as a loss then, the value functions will be convex and the decision makers will be risk seeking.

Prospect theory also differs from expected utility theory in the way it handles probabilities attached to particular outcomes. Classical utility theory assumes that decision makers value a 50% chance of winning as exactly that: a 50% chance of winning. In contrast, prospect theory treats preferences as a function of “decision weights” and it assumes that these weights do not always correspond to probabilities. Specifically, prospect theory postulates that decision weights tend to overweight small probabilities and underweight moderate and high probabilities.

Prospect theory also predicts a “certainty effect” in which “a reduction of the probability of an outcome by a constant factor has more impact when the outcome was initially certain than when it was merely probable”. This effect holds that people would much rather eliminate risk, than reduce it, even if the probability of a catastrophe is diminished by an equal amount in both cases. This finding is predicted by prospect theory because in prospect theory the decision weights “overweight” small probabilities and thereby inflate the importance of improbable events.

In addition to the certainty effect, Tversky and Kahneman (1981) have discussed a “pseudo-certainty effect”. This is similar to the certainty effect, except that in this case the certainty is apparent rather than real. This is often exploited by marketing professionals in advertising a free product with the purchase of 3 other similar ones, instead of simply offering a 25% discount. The idea is that a free service or product will be more appealing than a discounted offer, even if the free service does not represent a greater overall price reduction.

3.2.5 Regret theory

Regret theory (Loomes & Sugden, 1982; Bell, 1982), as prospect theory makes clear, decision makers evaluate alternatives relative to a reference point. The status quo is probably the most common reference point, but in some cases, people compare the quality of their decisions to what might have happened if they had made a different choice. The comparison of imaginary outcomes is sometimes referred to as

“counterfactual reasoning”, because it relies on the hypothetical events (Dunning & Parpal, 1989).

Counterfactual reasoning forms the basis of regret theory, an economic theory of choice. It rests upon two assumptions

- ❑ Many people experience the sensations we call regret and rejoicing;
- ❑ When people make decisions under uncertainty they try to anticipate and take account of those sensations.

It is similar in many ways to risk-aversion in prospect theory, except it adds “regret”. This need not be viewed as inconsistent with prospect theory, however, and in decisions involving a risk of death (i.e. open heart surgery), it makes no sense to speak of regret following a negative outcome.

3.2.6 Multi-Attribute choice theory

In more complex decisions when outcomes cannot simply be scaled along a single metric such as money or risk of disease, trade-offs must be made (i.e.. such as a trade off between cost and quality). When there is no objectively optimal solution, decision-makers tend to adhere to goals and values (Einhorn & Hogarth, 1981). As a result “multi-attribute choice” is concerned with “how”, rather than “how well” people make decisions.

Decision makers use a variety of different strategies to make multi-attribute choices and these strategies vary depending on the problem type. When decision makers are faced with simple choices between two alternatives, they often pursue what are known as compensatory strategies (Payne, 1982). A compensatory strategy trades off low values on one dimension against high values on another.

When people are confronted with complex choices among a number of alternatives, they use non-compensatory strategies. These strategies do not allow for trade offs. Four well-known examples of non-compensatory strategies are the conjunctive rule, the disjunctive rule, the lexicographic strategy, and elimination by aspects (Hogarth, 1987).

The conjunctive rule use allows for elimination of alternatives that fall outside certain preset boundaries. The disjunctive rule allows for evaluating each alternative in terms of its best attribute, regardless of how poor other aspects of the alternative might be. The lexicographic model identifies the most important dimension, compares alternatives, and then uses the next most important dimension on the remaining set of alternatives and so forth. Elimination by aspects is a probabilistic variation of the lexicographic strategy where each dimension of comparison is selected with a probability proportional to its importance. The alternatives are first compared with respect to a selected aspect, inferior ones eliminated; another aspect of comparison is then selected, and so forth.

3.2.7 More important dimension theory

Slovic (1975) pointed that when people are faced with two equally valued alternatives, they tend to choose the alternative that is superior on the more important dimension. His studies suggested that when faced with equally valued choices, people do not choose randomly, nor are they paralysed by indecision.

4 Methodology

4.1 Study development: exit questionnaire, household surveys, focus groups

Three main instruments were used in the West Bank (Palestine) – see appendix IV for demographic and social indicators – exist questionnaires, focus groups and household surveys

1. Determine the main attributes of satisfaction for patients (users), staff and medical doctors;
2. Determine the relative importance of various attributes of patient satisfaction;
3. Determine possible associations amongst attributes: common, unique and opposing attributes of satisfaction of each of the three groups above;
4. Understand healthcare seeking behaviour of patients/users.

Exit questionnaires assessed the levels of overall patient satisfaction with care upon completion of care. While, focus groups addressed the dimensions of satisfaction in more depth offering an opportunity for exploration of patient, staff, and doctor needs, wants and detailed episodes. The household survey offered an opportunity to obtain data from households (outside the medical facility context) to assess their needs and expectations of healthcare providers.

For analysis purposes, household survey data were inputted into the programme: Statistical Package for Social Science, SPSS version 7.5 for Microsoft Windows. Exist survey data were inputted into Microsoft ACCESS database programme.

Additionally the household survey was administered to fourteen hospital directors who were asked to rank patient satisfaction attributes.

The emergence and finalisation of the list below went through several stages. Initially, known attributes were selected from the literature (Avis 1995; Baker, 1990; Calnan, 1988; Cohen, 1994; Gustafson, 1993; Hall & Dornan, 1988; Kerssens, 1997; Klotz, 1996; Linder-Pelz, 1986; Poulton, 1996; Scardina, 1994; Williams 1994a&b).

Piloting and the general comments from the exit survey identified several other attributes specific to local culture and healthcare system (cost, medical records, sophisticated medical equipment, telephone appointments). The table below lists the 21 attributes chosen for the final list.

Table 4-1: Explanatory notes on attributes of satisfaction

	Item	Notes & Explanations
1	Appointment making by phone	Ability to call and select a time for appointment
2	Cleanliness	The general perceived level
3	Doctor adherence to appointments	Is the doctor available on time? Do patients have to wait for him or her
4	Doctor competence	Subjective user valuation of the level of doctor competency
5	Equipment (Sophisticated) availability	The impression of the level of sophistication and technology available
6	Fees (cost of service)	Out of pocket fees
7	Gender of medical provider choice	Ability to choose male or female physician or nurse, etc.
8	Hotel Services and Extras (food, comfort, TV)	Amenities
9	Hours of operation	Facility opening hours, and days of week
10	Information given about case	The details given to the user about the illness episode and treatment if any
11	Information on health awareness	Additional general information provided (written or oral) about the case or disease
12	Level of comfort	Subjective evaluation of the feeling of comfort
13	Medical records keeping	Are records kept of family history, preceding visits and treatments?
14	Orderliness in system	Perception of fairness as to appointment keeping and/or first-come first-serve system
15	Privacy & Confidentiality	Perceptions as to: Are discussions private? Is the information in records and files private? Is there a policy on giving out such information?
16	Second medical opinion access	Does the facility offer access to second medical opinion? Are users aware of this?
17	Time spent on Admin matters	Time spent completing forms, impressions of the bureaucracy
18	Time spent with doctor	Actual time in consultation with doctor
19	Time Waiting	In Waiting areas, line ups, prior to consultation
20	Treatment by staff	The social interaction and pleasantness of all other non-doctor personnel
21	Treatment by the MD (non-clinical)	The social interaction and pleasantness of the doctor

4.1.1 Instrument limitations

Due to the nature, length, location-specificity, and methodology of collecting these questionnaires, caution needed to be exercised as to conclusions and implications of the findings. The following section highlights the main strengths and weaknesses for each instrument.

4.1.1.1 Exit questionnaire

Firstly, only literate individuals willing to stop for up to five minutes and respond to the questions could complete the questionnaire. It therefore pre-selects for literate individuals pre-disposed to this process. Those with experiences that cause them to decide not to return to the facility may not bother or be simply missed due to random selection. Additionally, illiterate individuals may have a sub-set of satisfaction attributes that differ from literate individuals. Secondly, the method (inviting individuals at random to complete the survey) used and the nature of the conservative society in the West Bank, resulted in less female respondents (1:2). The on-site collection may have resulted in coercion and pressure to bias the data towards the more positive end.

The content of the survey largely restricted the input from individuals to the dimensions set by management. Thus it may have missed other important aspects users need to express. The open-ended question may have compensated for this weakness. And of course all user input was institution-specific.

Additionally, to provide statistical significance hundreds more would have had to be collected to differentiate the results by department. This was not feasible, nor practical in this setting and management opted for an average of ten to fifteen per day to provide an overall snap shot of user satisfaction.

Overall, despite the weaknesses outlined, management felt strongly as to the practicality of and essential information provided by this instrument.

4.1.1.2 Focus groups

The nature of these group discussion and the limited numbers of participants and the in-depth analysis desired, the data might not be generalised to the population at large (Evason, 1997). Secondly, certain strong-minded participants may influence the opinions of others, and therefore the data: some participants may not express a dissenting opinion in public.

The choice of the facilitator is critical to the success of focus groups. Experience, preparations, and strong inter-personal and group management skills are essential. The facilitator must ensure that all participants are able to speak their minds and respond to ideas and concepts.

The facilitator selected for this set of studies, had formal training on the methodology, knowledge of the health sector, and participated in the research design for this method with the researcher.

This method elicited very emotional responses to several issues of concern to all three groups. Discussions and observations of the group dynamic also give insight into healthcare seeking behaviour of users, as well as the importance of various attributes of satisfaction.

Additionally, participants in these focus groups were not evaluating a specific facility, but rather expressing their general beliefs, expectations, needs, and experiences.

In contrast to the largely positive results from the facility-specific exit survey, the focus groups generated replies expressive of disappointment, anxiety and dissatisfaction with current levels of healthcare.

4.1.1.3 Household survey

The design, content and methodology used in this instrument lend themselves to statistical analysis and correlation. Additionally, conducting surveys at households may offer the respondent a more ideal setting to honestly express views without the coercion that may result during an exit survey.

However, the limited nature of the survey (rank a set of 20 attributes) can only yield information on one issue. The form may have also been too complex and not well understood by some respondents. Examining 20 attributes and choosing the top seven in order of priority (most important to least important) needed supervision and administering by the surveyors. Nevertheless, approximately 90 forms were rejected because respondents simply marked attributes on the list 1 through 7 in that order (as they appeared pre-sorted on the survey).

The wording and expressions used in listing the attributes may also be alien to users. Although care was taken in phrasing the list, and piloting with users at the Ramallah facility prior to introduction into the field helped fine tune questions, the list may have still been too academic to an average user.

4.2 Summary of methods and data collection table

Table 4-2: Summary of research methods

All surveys, questionnaires and focus groups conducted in Arabic						
A. Household Survey Questionnaire with Palestinian Central Bureau of Statistics (PCBS) Conducted Oct-Dec 1997			B. Exit Survey at Medical Facility 1996-1997	A Focus Group Doctors Nov 12, 1997	B Focus Group Staff Nov 16, 1997	C. Focus Group1 users Dec 22, 1997
Notes	900 Surveys		N=2,753	N=8 6 Male 2 Female	N=7 4 Male 3 Female	N=6 4 Male 2 Female
	579	321				
	Returned	not- returned				
	477 Valid	102 Invalid				
PCBS surveyors had this survey added to their ongoing programme. Respondents were asked to rank the top 7 most important of 21 attributes on a list (in a prospective sense). Confounding variables were also collected on respondents (Gender, residence, profession, years of education, age group)		Data collected over 2 year period at outpatient & diagnostic medical facility in West Bank Questionnaire (one page) used evolved over the period (13 versions)		<ul style="list-style-type: none">• All focus groups conducted by same facilitator• Two note takers for doctors and users groups. One note taker for staff group• Researcher sat as observer taking notes in all three sessions		

A. Household Survey Questionnaire with Palestinian Central Bureau of Statistics (PCBS) Conducted Oct-Dec 1997				B. Exit Survey at Medical Facility 1996-1997	A Focus Group Doctors Nov 12, 1997	B Focus Group Staff Nov 16, 1997	C. Focus Group1 users Dec 22, 1997
Process	<ul style="list-style-type: none"> • Formed checked and & variables coded • Entry into SPSS 7.5 (windows version) • Data verified and cleaned • Summary statistics and charts plotted 	Data entry into Microsoft Access programme to allow sorting by duration, department, or question.		<ul style="list-style-type: none"> • All notes translated into English • Analysis of notes to extract key concepts, repeat categories, emotional points, and comparisons amongst the three groups 			
Implications	<ol style="list-style-type: none"> 1. Relative importance of attributes based on frequency & mean calculations 2. Possible association amongst attributes 3. Regression analysis with confounding variables 	<ol style="list-style-type: none"> 1. Association between overall satisfaction and key attributes 2. Insight into attributes that trigger complaints 		<ol style="list-style-type: none"> 1. Insight into known and new attributes of satisfaction 2. Relative importance of attributes for each group 3. Insight into common, unique and opposing attributes between the three groups 4. Determinants of job satisfaction. 			

***D.** In Addition, 14 hospital directors and administrators (clinical and non-clinical backgrounds) in one group session (Sept 10, 1997), were asked to rank the attributes of satisfaction (household survey form) for patient

4.3 Exit questionnaire

A one-page questionnaire (appendix I) containing close-ended questions and one open ended question, was used to assess the level of outpatient satisfaction. The survey was randomly distributed to users upon completion of services as they walked out of the facility between the hours of 8 am and 6 pm (four-story out-patient and diagnostic fee-for-service facility). The facility (Arabcare Medical Services outpatient and diagnostic centre) was a four story building in the centre of the city of Ramallah offering advanced diagnostics (including Medical Lab, MRI, CT, Nuclear Medicine) and outpatient facilities in which over 40 general practitioners and specialists worked. Many professionals and the general public viewed this facility as one of the most advanced in terms of equipment, physical space and layout. Ten to fifteen questionnaires were collected daily. Data was entered into a specially designed database using Microsoft Access to enable sorting and analysis. The programme enables analysis and sorting by duration, department, selected attribute, and/or open-ended question comment. Data entry personnel were asked to classify entries through a set of pre-defined categories in the programme used to classify the comments (more than one category could also be chosen by the data entry person)

During the months of April through December of 1996, a total of 1,256 surveys were collected, of which 374 males, 171 females, 711 unknown. Clients filled out most questionnaires immediately upon completion of services. An additional 1,504 exit surveys were collected between Feb-Aug 1997.

All (except one) survey questions were close-ended. The open-ended question was the last on the questionnaire and sought to elicit comments and suggestions. The results from this open-ended question were instrumental in later determining the dimensions of satisfaction and developing the household survey attributes of user satisfaction.

The initial dimensions of the exist survey were selected from the literature (Avis 1995; Baker, 1990; Calnan, 1988; Cohen, 1994; Gustafson, 1993; Hall & Dornan, 1988; Kerssens, 1997; Klotz, 1996; Linder-Pelz, 1986; Poulton, 1996; Scardina, 1994;

Williams 1994a&b) and management observations at the facility in Ramallah, West Bank. From the early stages, it was decided, for practical reasons, that the questionnaire would not exceed one page, would be very simple in language, and would be largely close-ended questions to allow for easy data processing. Only one open ended questions was used to gather general comments and suggestions. The survey also contained a number of questions that would fit under “marketing research” rather than “user satisfaction” categories.

The questionnaires were inputted daily into the specially designed ACCESS database. Monthly reports were generated. The open-ended question played a role in modifying various other questions within the survey to obtain information of dimensions not initially collected. For example, initial versions, did not distinguish between clinical care and treatment by staff, administrative processing and nursing care. It was evident from the comments on these issues that information was needed to enable management to further identify the sources of tension and/or dis-satisfaction. The evolution process always entailed a compromise between the numbers of questions and dimensions of interest and the need to limit the length to one page.

4.4 Focus groups

See appendix II for complete transcripts from note takers.

4.4.1 Purpose

1. Probe further into key attributes of client (patients, doctors, staff) satisfaction with health services and health facilities;
2. Determine which attributes are common, opposing or unique to each client group;
3. Explore potential new dimensions of importance to client satisfaction.

4.4.2 Target groups

1. Primary users of health services (Both in-patient and out-patients);
2. Medical doctors (either employees or self-employed, from the various providers – government, private, and UN);
3. Staff (health professionals, clinical and administrative support) in a medical facility.

4.4.3 Questions

4.4.3.1 Patients

1. How do you choose a medical facility for your own treatment?
2. What should this medical facility focus on to meet your needs and expectations?
3. What factors would cause you not to return to a medical facility?
4. What aspects (external) influence your decision when choosing a medical facility?
5. In your opinion, what are the most important factors contributing to good medical care? Please rank in order of importance (1: most important)
6. Rank the top seven items on the sheets provided in order of importance (1: most important)

4.4.3.2 Staff

1. As staff, in order to meet your expectations and satisfy your needs, what are the most important aspects a medical facility must provide? (Clinically, physically, emotionally, amenities, etc.);
2. To do your job right, what factors are most important (internal to your organisation);
3. What are the characteristics of a good medical facility? Rank them please in order of important (1: most important);
4. For patients to receive good care, what are the most important aspects? Please write on the sheet provided;
5. What internal event (decision or action) would make you want to leave your organisation?
6. If patients are presented with the following list (appendix 2), how would they rank the items from 1 to 7 (1 being most important to 10 least - you may give items similar ranking.

4.4.3.3 Doctors

1. In order to meet your expectations and satisfy your needs, what are the most important aspects a medical facility must provide either as a doctor or for your patients? (Clinically, physically, emotionally, amenities, etc.);
2. To do your job right, what factors are most important (external to your organisation);

3. a. What are the characteristics of a good medical facility? Rank them please in order of important (1: most important);
b. If you need to refer a patient, what criteria do you use in selecting the referral facility?
4. For patients to receive good care, what are the most important aspects? Please write on the sheet provided.

If patients are presented with the following list (appendix 2), how would they rank the items from 1 to 7 (1 being most important to 10 least - you may give items similar ranking.

A Moderator and two note takers were used for the doctors and users sessions. One note taker was available for the staff focus group.

4.4.4 Focus group discussion methodology

For each of the three client groups, one set of focus groups was conducted. The venue was chosen to be an off-site convenient and centrally located room meeting offering comfortable surroundings. Participants were informed upon arrival by the facilitator about the general purpose for their presence, the expected duration for the session, snacks were to be offered at the end of the session. The facilitator did not offer any more information or address detailed questions about the content of the planned discussions.

4.4.4.1 User/patient selection

Conducted on December 22nd, 1997, N=6; 4 Males, 2 Females.

Homogenous (socio-economic status) group of strangers, attention was given to age (ensuring that a wide discrepancy does not exist) and gender (ensuring that no one group dominates in numbers) to facilitate free discussion.

The facilitator was asked to randomly select and invite persons he did not know personally, but through a secondary network. The aim was to have a mix of male/female participants ranging of all age groups.

4.4.4.2 Doctors selection

Conducted on November 12th, 1997. N=8; 6 Males, 2 Females.

Doctors were selected from the West Bank directory of physicians, choosing every 10th name and making a telephone call to invite. If person was not reachable or declined, the next on the list was called. Attention was given to ensuring having both male and female doctors attend.

4.4.4.3 Staff selection

Conducted on November 16th, 1997. N=7; 4 Males, 3 Females.

Staff were chosen by listing all healthcare providers in the Ramallah region (central) of the West Bank. A list was made of various hospital departments (nursing, diagnostics, administration, reception, rehabilitation, etc). After randomly assigning each hospital to a selected department, a call was made to facility directors to inform them of the planned study and asking to speak to the pre-selected department.

Whoever answered the call was invited. None declined. The methodology called for asking them to pass on the telephone to a colleague standing nearby if they declined.

4.5 *Household survey*

1. The development and finalisation of the form, and its content lasted over a 6-week period during which the form was piloted at a medical facility in Ramallah and with both patients, staff and colleagues. The final selection of 21 attributes was a combination of known attributes from the literature, the feed back from the exit survey, and piloting.
2. Three form types (A4 double-sided, and numbered 1,2,3 and on three different colour sheets- See appendix III) for the household survey were printed in which the patient satisfaction attribute list were randomised (see appendix III) to control for primacy (respondents selecting attributes they see at the top of list) and latency (or recency) effects (respondents selecting attributes from the bottom of list) when participants select and rank the variables (Plous, 1993: 42)
3. The surveys were delivered to the Palestinian Central Bureau of Statistics (PCBS) head of the household survey department with instruction sheets as to how proceed. To ease the process for the field workers, the surveys delivered were pre-sorted (each surveyor carried a mix of the three form types).
4. Cluster samples of Palestinian households were visited by field workers over a period of 7 days in the West Bank. The surveyor selects a member of the

household using the Kish survey (1965) method – they were instructed to survey those only over 18 years of age. If the person is not available, the survey was left over night, and collected over the next 1 to 2 days. (Surveys left over night were marked as such)

5. Surveyors were given clear instructions that respondents must first read the complete list of 21 attributes, before making any selections.
6. Surveys carried two numbers: a simple serial number, and a PCBS survey number. Further information can be obtained from the PCBS on each household utilising their serial number.
7. Three survey cycles (1 week each, for 300 households each) were completed on a monthly basis between October and December 1997.
8. Returned forms were checked for completeness and errors.
9. Variables were coded and entered in to SPSS (version 7.5 for windows) for analysis and re checked (see appendix III for screen snapshots).
10. The data file was re-checked for accuracy by both comparing to the original forms and random checks.
11. Forms in which participants ranked the attributes (regardless of form type or colour) in order, 1 through 7, were rejected as invalid (interpreted as misunderstanding the instructions)
12. SPSS enabled statistical analysis and generation of tables. Microsoft Excel 2000 spreadsheet was used to plot the data.

4.5.1 Confounding (independent) variables

Household surveys N=477

Each survey, logged the following information on respondents

- ☐ Gender (Male, Female)
- ☐ Profession (Technical, professional, unemployed)
- ☐ Residence (City, town, camp)
- ☐ Age group (18-34 yrs, 35-54 yrs, 55+ yrs)
- ☐ Years of education completed (0 yrs, 1-12 yrs, 13+ yrs)

As well, the four following questions to verify for independent variables that may modify response:

- ☐ Have you visited a clinic, hospital or medical centre in the past five years in Palestine (West Bank & Gaza);
- ☐ Have you received any treatment in the past 10 years in hospitals or medical centres in Israel or abroad?
- ☐ Persons who may have worked in healthcare facilities;
- ☐ Surveys left overnight with household.

The tables below summarise the results:

Table 4-3: Household survey confounding variables frequencies

N=477		n	%
Form Types	White 1	173	36.3
	Green 2	146	30.6
	Pink 3	158	33.1
Has visited medical facility in the past 5 years?			
	Yes	418	87.6
	No	54	11.3
	NA (data not available)	5	
Has visited medical facility abroad over past 10 years?			
	Yes	364	76.3
	No	105	22.0
	NA	8	
Has worked, or works in healthcare facilities?			
	Yes	10	2.1
	No	398	83.4
	NA	69	14.5
Survey left overnight with household?			
	Yes	267	56.0
	No	200	41.9
	NA	10	2.1

Table 4-4: Household survey confounding socio-demographic variable frequencies

N=477 NA=data not available	n	%
Gender		
Male	106	22.2
Female	369	77.4
NA	2	
Profession		
Unemployed	362	75.9
Professional	18	3.8
Technical	91	19.1
NA	6	
Education		
0 years	41	8.6
1-12 years	353	74
13 or more years	79	16.6
NA	4	
Residence		
City	212	44.4
Town	250	52.4
Camp	15	3.1
Age Group		
18-34 yrs	302	63.3
35-54 yrs	137	28.7
55+	36	7.5
NA	2	

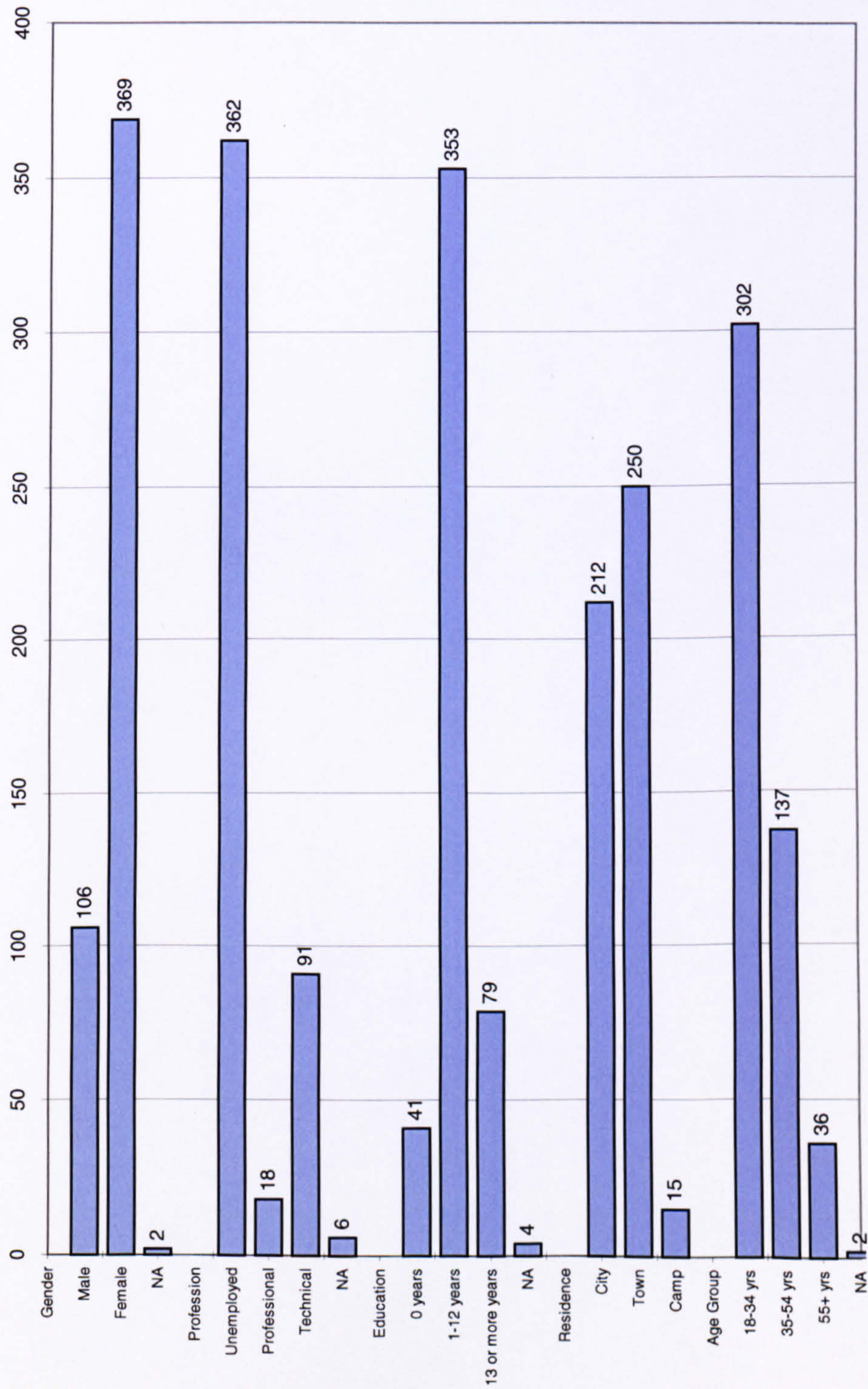


Figure 4-1: household survey independent socio-demographic variables frequencies bar graph N=477

Table 4-5: Household survey ranking from forms 1,2 & 3: sorted by mean from "total" column

Ranked by Mean	Form Type	White Form 1 n=173				Green Form 2 n=146				Pink Form 3 n=158				Total N=477			
		Mean	n	SD		Mean	n	SD		Mean	n	SD		Mean	N	SD	
16	Appointment taking by phone	4.93	41	1.66		4.67	30	2.14		4.71	28	1.61		4.79	99	1.79	
1	Cleanliness	2.02	131	1.64		2.87	113	1.97		2.85	135	1.89		2.57	379	1.87	
5	Equipment (Sophisticated) availability	4.10	108	1.67		3.78	89	1.92		4.41	93	1.73		4.10	290	1.78	
7	Fees (Cost of service)	4.05	66	1.88		4.74	62	1.85		4.17	64	1.96		4.31	192	1.91	
15	Gender of medical provider choice	5.11	35	1.75		4.77	30	1.91		4.17	41	2.00		4.65	106	1.92	
9	Hotel services & extras	4.05	22	1.79		4.75	20	1.86		4.67	9	1.32		4.43	51	1.75	
10	Hours of operation	4.63	30	1.97		4.36	14	1.69		4.27	11	1.19		4.49	55	1.75	
12	Information given about case	4.47	75	1.70		4.77	48	2.03		4.67	66	1.71		4.61	189	1.79	
18	Information on General Health Issues	4.82	34	1.75		4.61	33	1.68		5.19	37	1.61		4.88	104	1.68	
4	Level of comfort	3.39	44	1.92		4.24	34	1.86		4.20	20	1.70		3.85	98	1.89	
6	MD adherence to appointments	4.74	82	1.60		4.04	79	1.90		3.60	92	2.30		4.11	253	2.02	
2	MD Competence	2.37	131	1.71		2.91	119	2.04		2.71	115	1.81		2.65	365	1.86	
19	Medical records keeping	5.74	23	1.32		4.83	23	1.72		4.52	29	1.86		4.99	75	1.73	
11	Orderliness in system	4.71	69	1.72		3.93	69	1.76		5.20	64	1.53		4.60	202	1.75	
8	Privacy & Confidentiality	5.15	54	1.41		4.00	51	1.91		4.02	57	2.03		4.39	162	1.87	
20	Second medical opinion access	5.29	14	1.33		4.88	17	1.50		5.27	22	1.58		5.15	53	1.47	
21	Time spent on Admin matters	5.67	6	1.51		4.92	13	1.61		5.30	10	1.34		5.21	29	1.47	
14	Time spent with MD	4.56	27	1.67		4.62	21	2.04		4.75	24	1.94		4.64	72	1.85	
17	Time Waiting	4.13	31	2.00		5.26	19	1.63		5.25	28	1.62		4.81	78	1.85	
3	Treatment by MD	3.60	107	1.75		3.86	70	1.92		3.87	87	1.69		3.76	264	1.78	
13	Treatment by the staff	5.49	72	1.33		4.51	67	1.66		3.86	73	2.10		4.62	212	1.85	

To illustrate any effects the first four variables may have had (form type, survey left overnight, recent visit to a medical facility, or visit to medical facility abroad), data were plotted using Excel 2000. The graphs are shown on the following set of pages, 2 plots per variable, one with the mean values for the attributes, the other with the frequency proportions. Only 10 (2.1%) respondents indicated having worked in a healthcare facility and thus this variable was not deemed essential for analysis.

The high degree of coupling is shown by the minimal variations and deviations of the lines in each plot, thus indicating no significant effects of these confounding variables (form type, survey left overnight, recent visit to a medical facility, or visit to medical facility abroad) on the observed results.

Although statistical tests (t-test) can be performed to assess the significance more precisely (at various levels of confidence), the Excel plots that follow adequately serve the purposes of this study.

Figure 4-2: household survey attribute mean values vs. form type

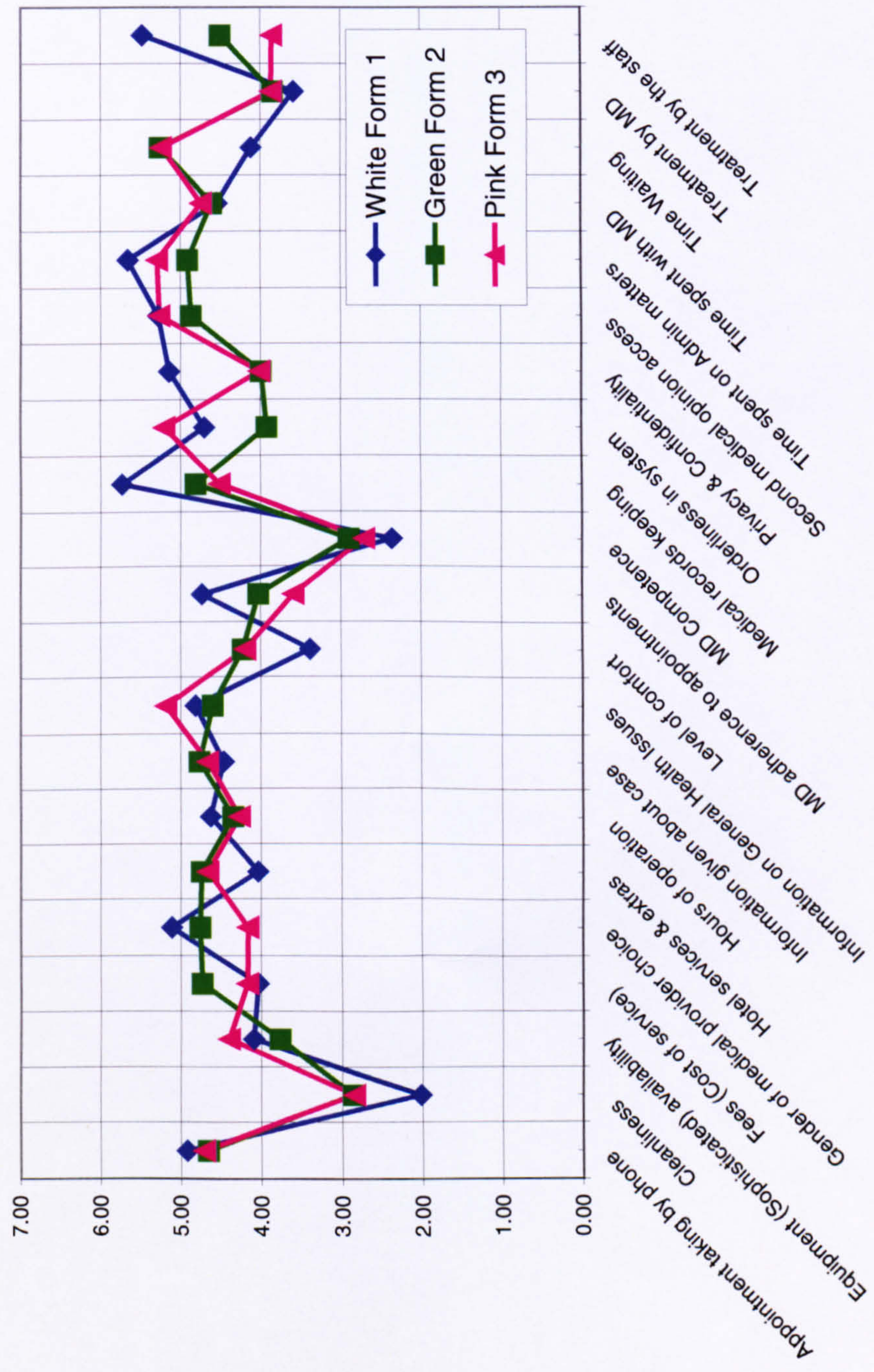


Figure 4-3: Household survey attributes frequency proportions vs. form type

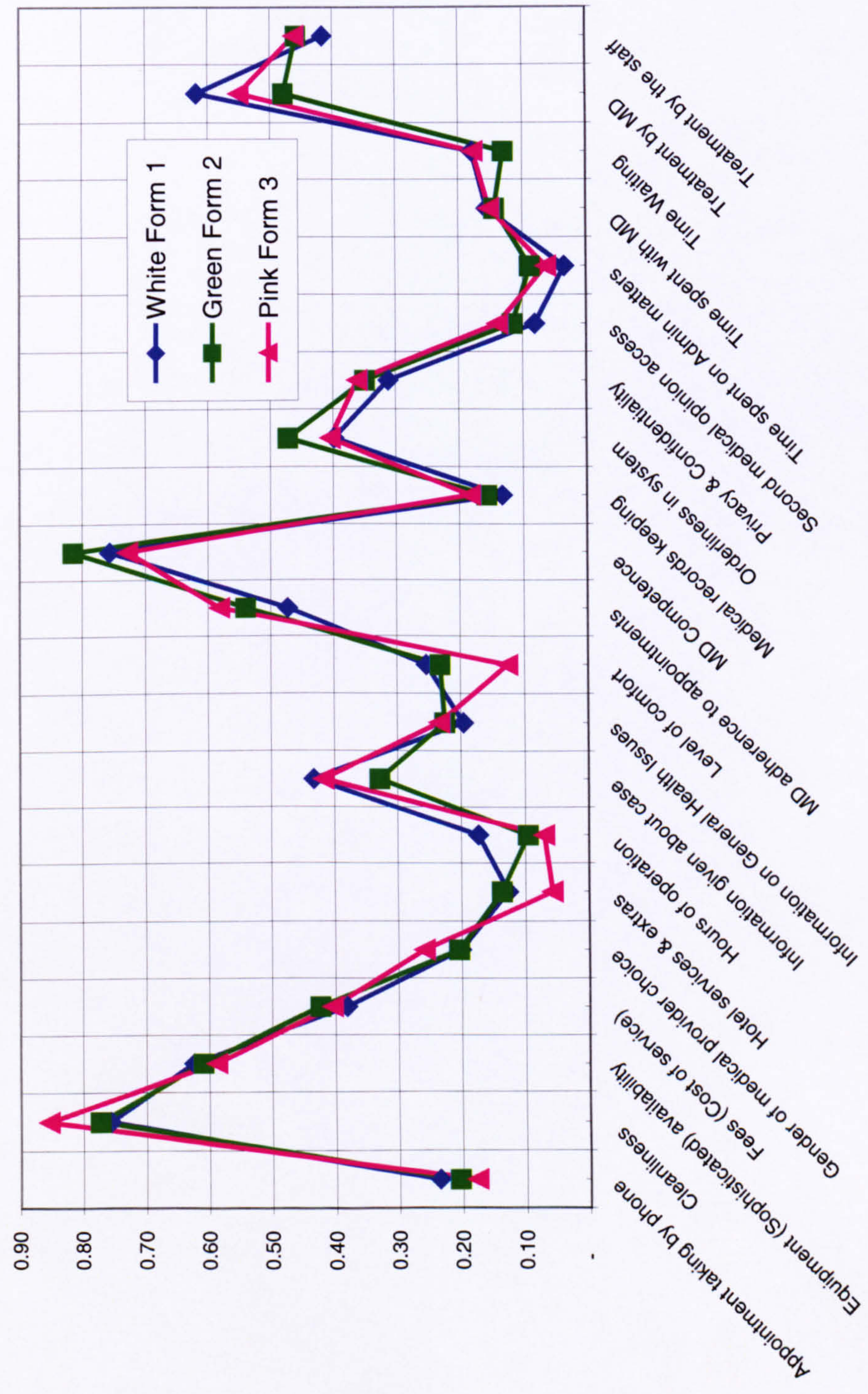


Figure 4-4: Household survey attributes mean vs. survey left with household?

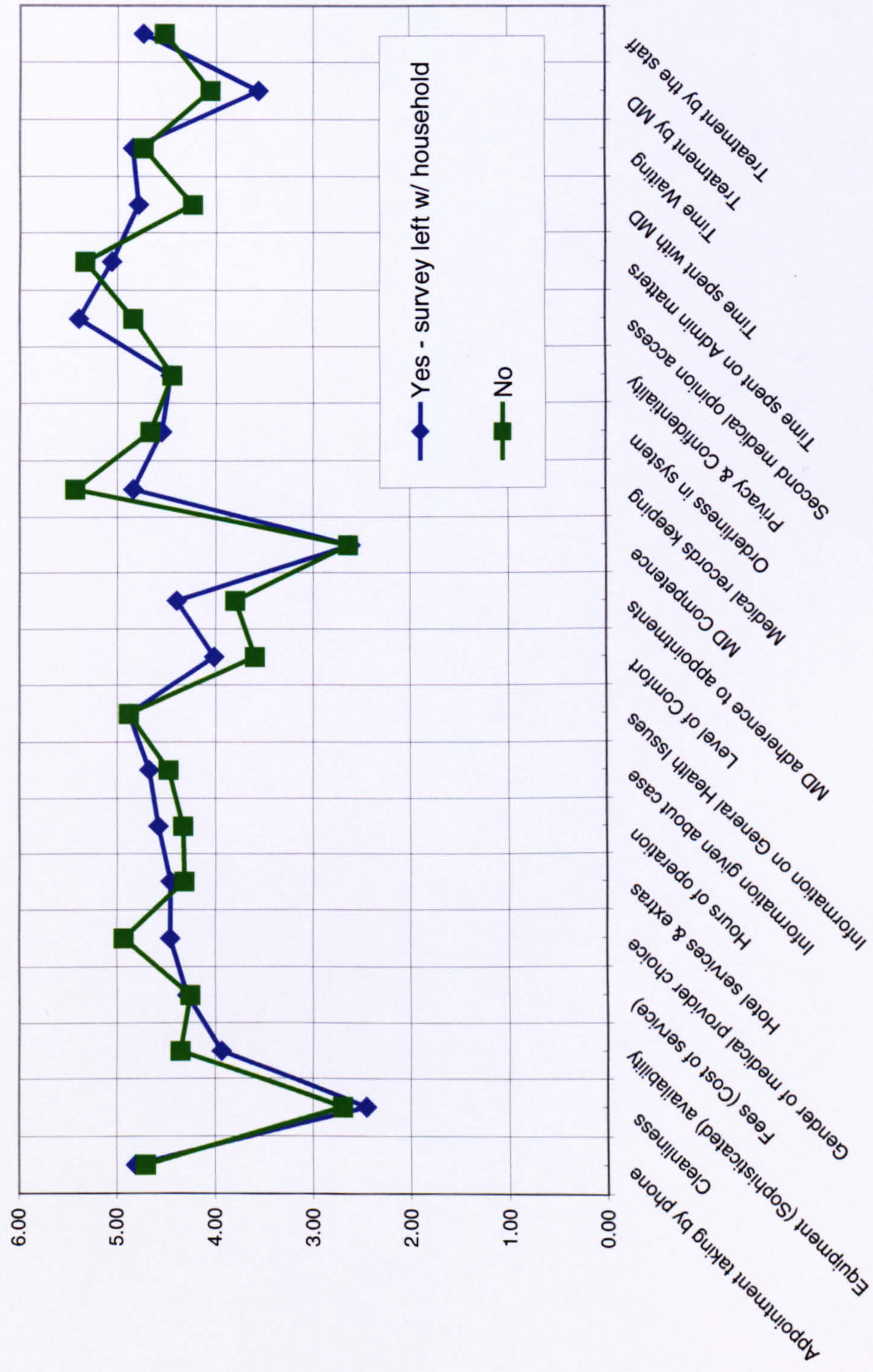


Figure 4-5: Household survey attribute frequency proportions vs. survey left with household?

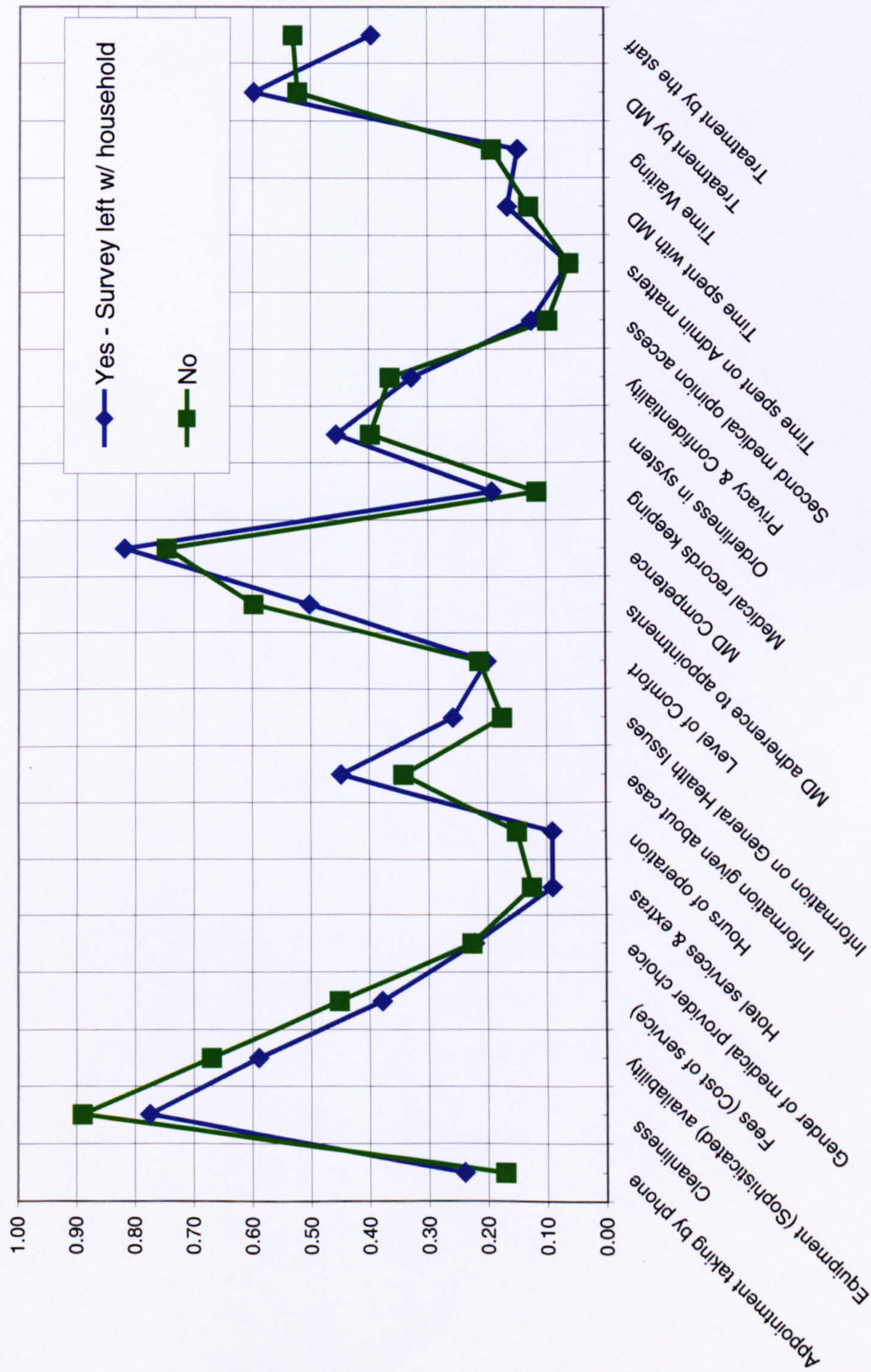


Figure 4-6: Household survey attributes frequency proportions vs. visit to medical facility abroad?

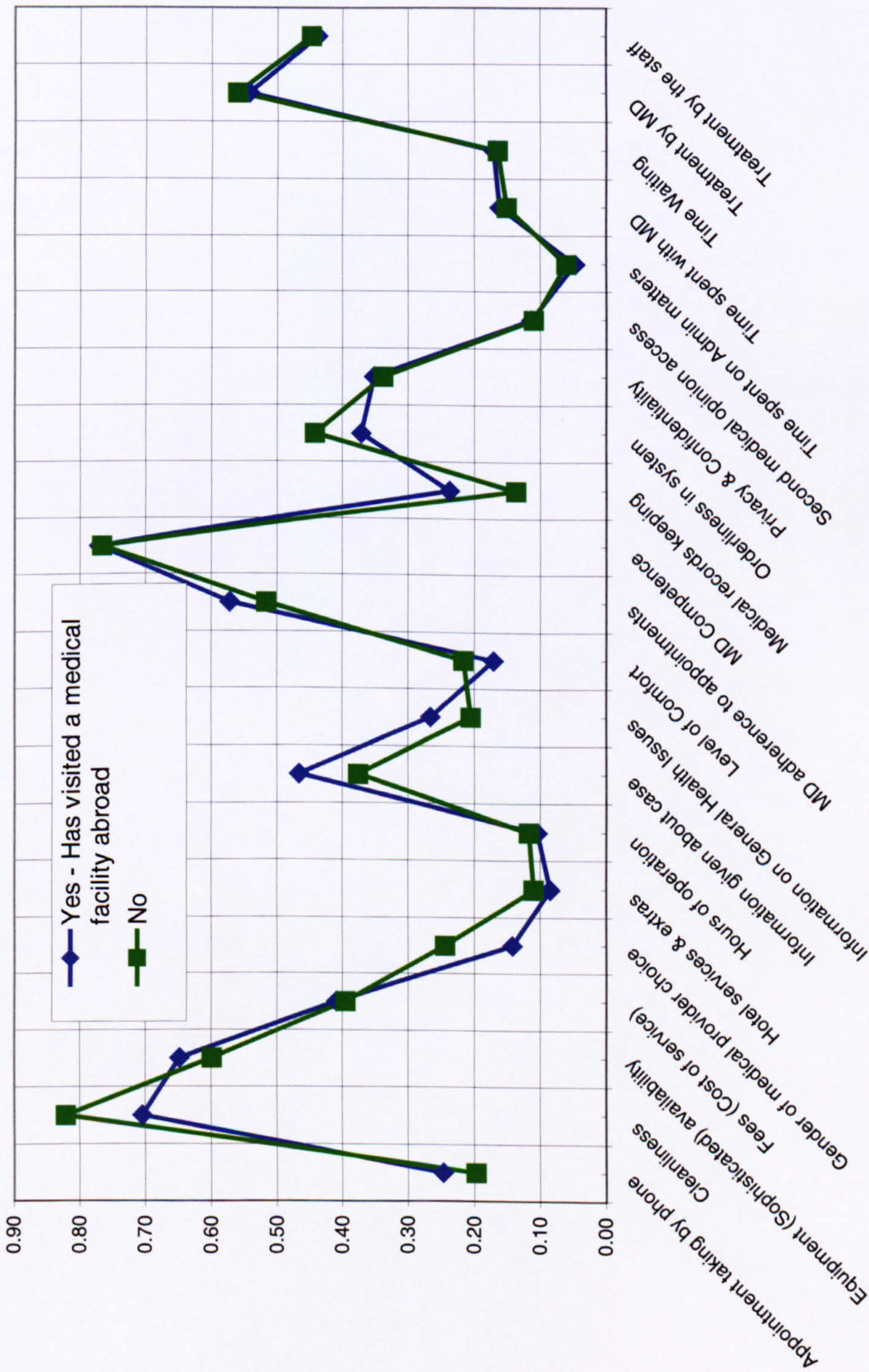


Figure 4-7: Household survey attributes mean vs. visit to medical facility abroad?

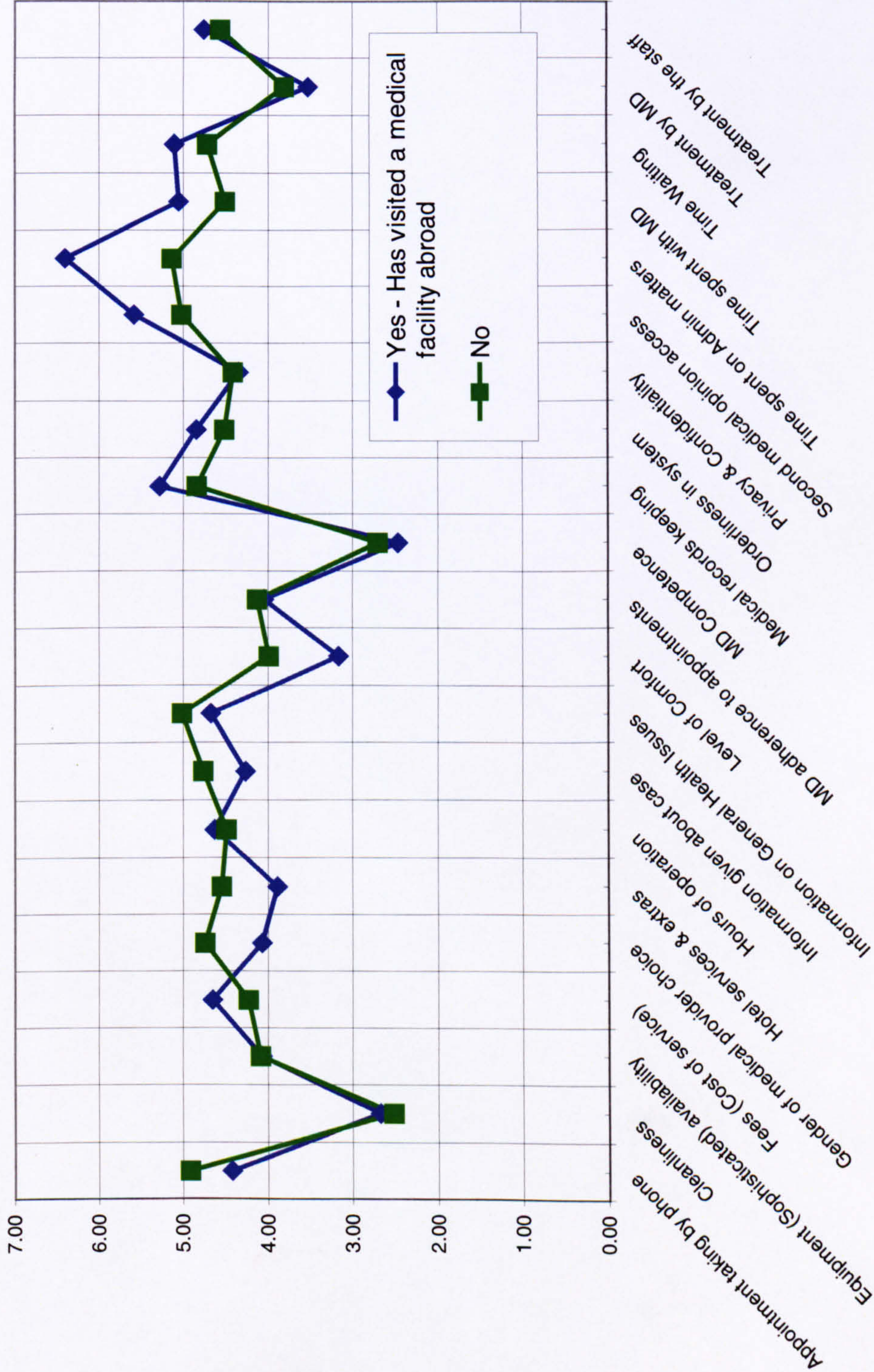


Figure 4-8: Household survey attributes frequency proportions vs. recent visit to medical facility?

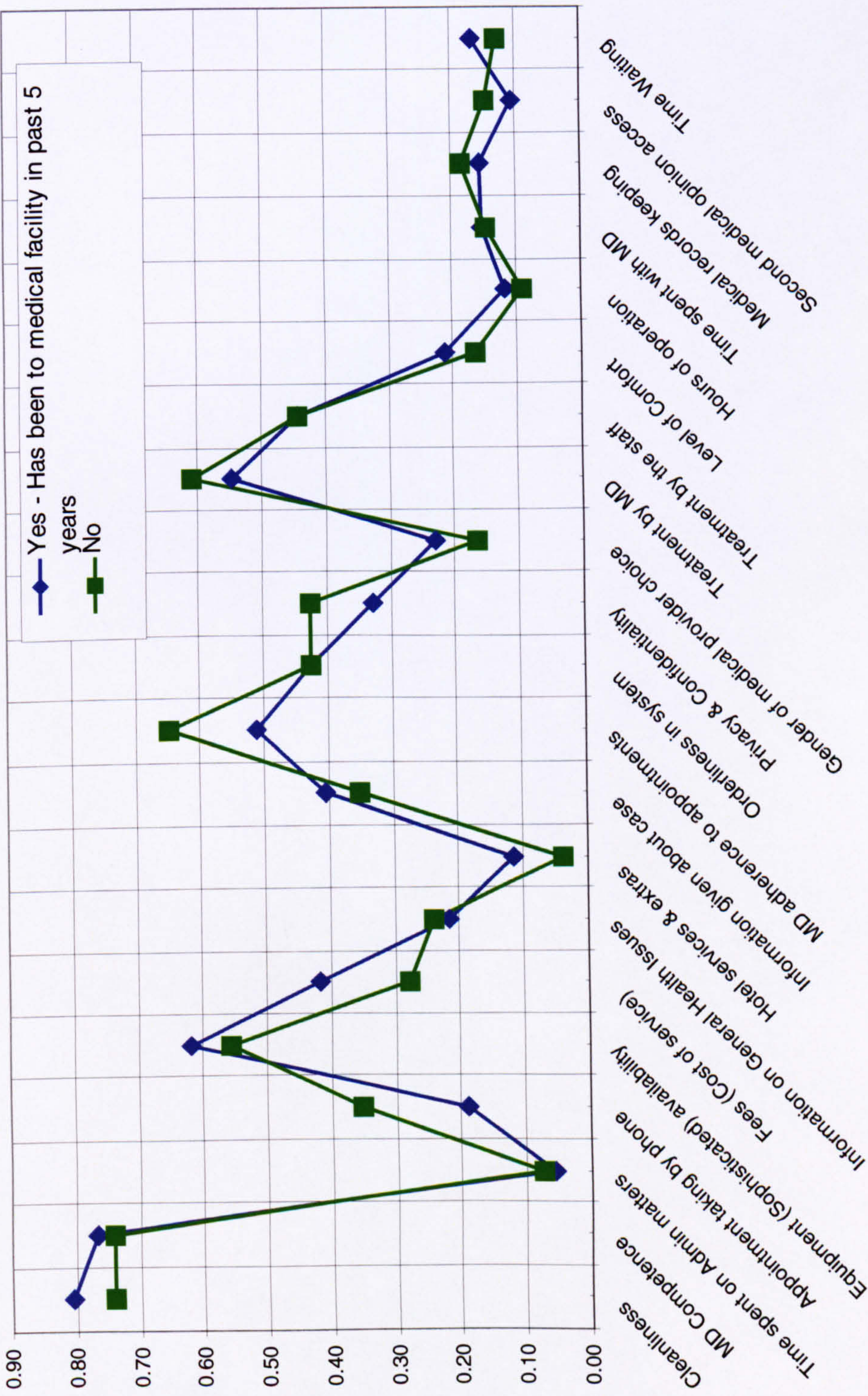
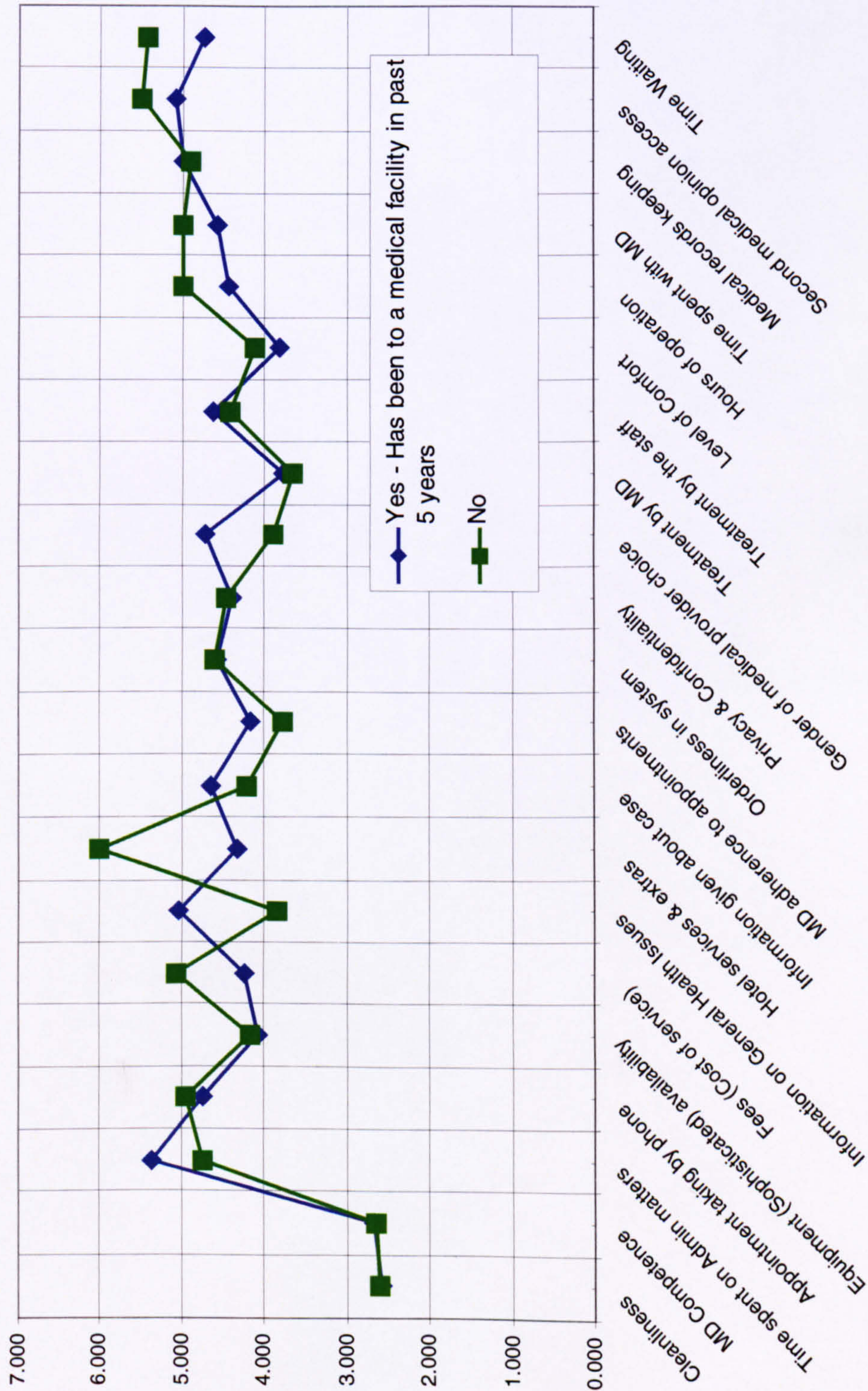


Figure 4-9: Household survey attributes mean vs. recent visit to medical facility?



4.6 Hospital administrators & directors survey

Fourteen (14) hospital directors and administrators (clinical and non-clinical backgrounds) in one group session (Sept 10, 1997), were asked to rank the attributes of satisfaction (household survey form) for patients. They were asked to read the list of patient satisfaction attributes and rank the top seven (1: most important, 7: lesser importance) from the perspective of their patients/users. The setting was a management seminar attended by West Bank hospital directors. The ranking preceded the seminar.

The results of their ranking was later presented to them and a discussion ensued about the influence of user out-of-pocket fees on patient selection of care facilities and also its contribution to management “problems” when patients cannot afford to pay.

5 Analysis of the data

Due to the nature of satisfaction expressions, time-spread, location-specificity, culture-specificity, and methodology of collecting these questionnaires, caution needed to be exercised as to conclusions and implications of the findings. Mixing methods to obtain a slightly richer picture should be interpreted with care. Moreover, the reality of what is being investigated may be considerably more complex than the data collection methods are capable of demonstrating (Easterby-Smith, 1991).

The data collected are both qualitative (focus groups, exit surveys in part) and quantitative (exit questionnaire in part, household survey). The analysis will examine both aspects with a concentration on the intangible side of the results. Some statistical tools are applied as well to assist in interpretation and to shed light on potential insights.

The data collected shed light on the issues of real concern to the three major client groups of management. Through surveys and focus groups, a picture emerges highlighting attributes of satisfaction, which in turn shed light on values, beliefs and attitudes: determinants of behaviour (observed action).

It is difficult to quantify this type of data or assign orders of magnitude of importance to the various beliefs and attitudes expressed. Although it appears that a hierarchy of patient satisfaction attributes emerges from the household survey data, this hierarchy is likely to change over time. Therefore, a rigorous statistical analysis of the results from the household surveys and exit surveys was not pursued. The data are best analysed on qualitative merit and leads it may give.

Additionally, given the complexity of decision-making in healthcare and multi-dimensional nature of satisfaction findings, a mathematical model is not best suited for decision-making in these settings. Thus, in analysing the data, it is linked to both a descriptive and prescriptive scenarios of decision-making and satisfaction measurement.

The instruments employed in this study can indeed assist management in more effective decision-making. It is important to note that modelling should be examined with caution: it is an attempt to explain reality, and *not* an attempt to substitute for it.

All listed attributes are known contributors to satisfaction. The relative importance of the various attributes is a function of many factors; state of mind, location of survey, recent experiences, beliefs and values. The results cannot point to the order of magnitude of importance of one attribute over another. They serve as a guide to indicate preferences, and are reflections or extensions of beliefs at a particular time. The relative ranking or hierarchy given to the various attributes may reflect current needs and expectations.

Expectations as forms of beliefs, influence attitude, the evaluative judgement, and do affect the frame of mind of users as they respond to questions or complete surveys.

Before presenting the summary of findings, it is important to keep in mind as one reads through, the dynamic nature of predictors of satisfaction. This is in part linked to human nature to fulfil some higher need once “current ones” are achieved: Maslow’s (1954) hierarchy of need. Secondly it is important to examine attributes of satisfaction as reflective of beliefs and expectations.

5.1 Results from exit questionnaires

During the months of April through December of 1996, 1249 surveys were collected, of which 374 males, 171 females, 711 unknown. An additional 1,504 exit surveys were collected between Feb-Aug 1997.

Clients filled out most questionnaires immediately upon completion of services. The main findings are summarised in the following table:

April-Dec 1996 N=1249

Table 5-1: Summary of exit questionnaire data 1996

Rating	Reception	Medical Care	Cleanliness	Aesthetics
Excellent	837 (67%)	931(74%)	1,111 (88%)	1,082 (86%)
Good	342 (27%)	253 (20%)	133 (11%)	166 (13%)
Acceptable	46 (4%)	24 (2%)	9 (1%)	7 (< 1%)
Poor	27 (2%)	10 (1%)	1 (< 1%)	0 (0%)
Unable to rate	4 (< 1%)	38 (3%)	2 (< 1%)	1 (< 1%)

Although an overwhelming majority of those surveyed rated the services positively, it is necessary to probe further and identify the attributes that constitute “patient satisfaction”. The open ended question, where respondents were invited to make suggestions and/or write about experiences, may assist in defining factors of primary concern to patients. For those who wrote comments (n=766), the responses were categorised by topic, the highest percentage (24%) was complaints pertaining to delays in receiving the medical service. Another 12% suggested reducing the cost of the services, and 4% complained about certain aspects of the clinical services offered. Further analysis of the complaints on delay revealed that the majority were dissatisfied due to a perceived lack of clinician punctuality. On the positive end, 24% expressed their appreciation of friendly services and cleanliness.

Over time, the percentage of respondents expressing overall satisfaction did vary slightly. These variations could be linked to a range of internal operational and personnel issues. At that particular facility, observed fluctuations were attributed to

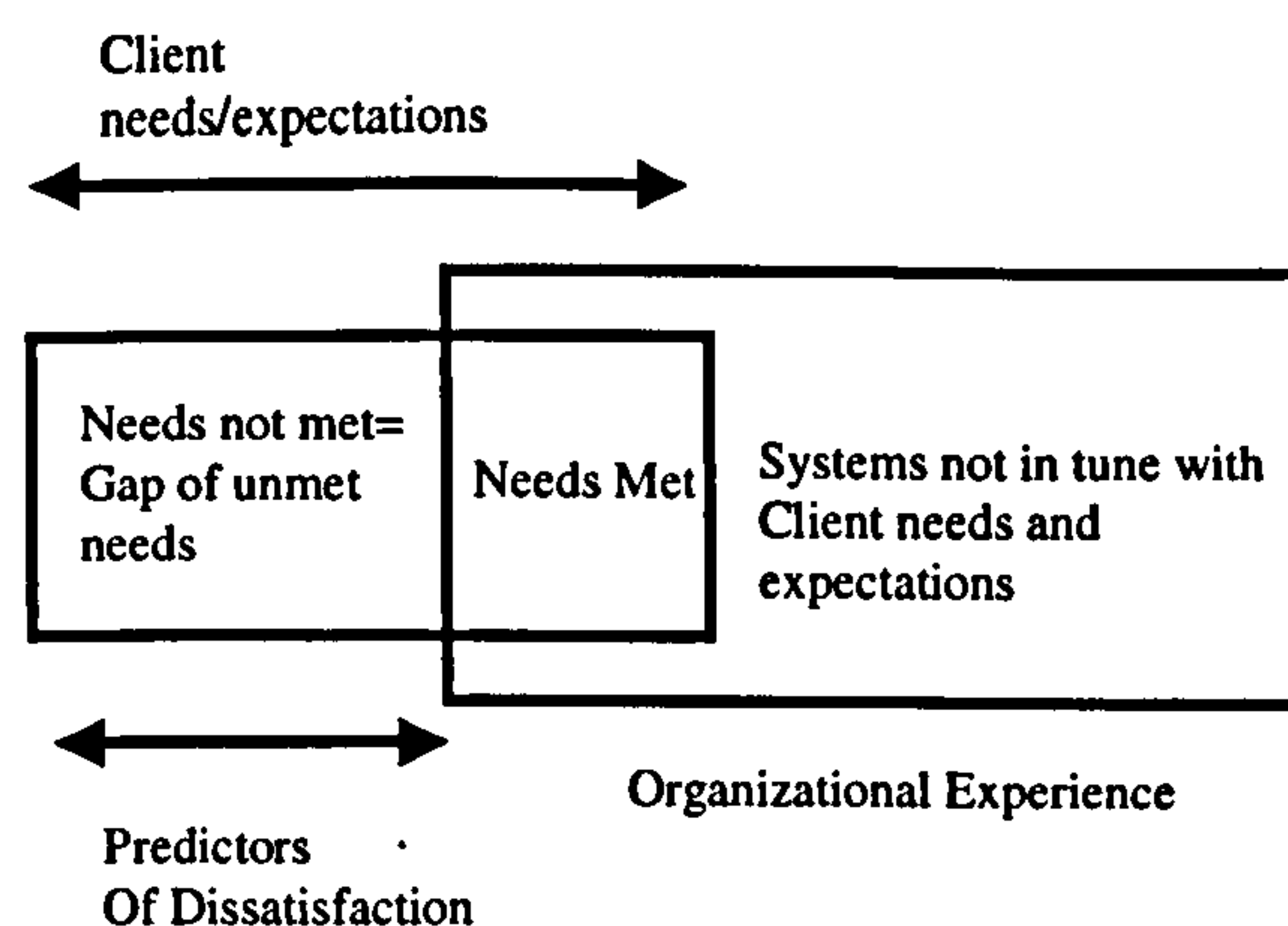
1. Disorder in patient management systems
2. Under staffing
3. Diagnostic equipment not in working order
4. Lack of policy to regulate doctor adherence to clinic appointments

From a patient perspective, these observations demonstrate that the provision of a satisfactory level of health services to meet people's expectations are associated with reduced waiting times, friendly services, lower fees, medical competence, and environmentally aesthetic facilities.

The results from this survey instrument lend some support to theories that invoke dissatisfaction as an outcome due to the gap (figure 5.1) between expectations and perceived care delivered (fulfilment & discrepancy theories, see section 3.1.2). Indeed some of the questionnaires that triggered complaints to management seem to have arisen from a sense of inequity: situations in which people seemed fully content with the level of care and the system, however a sudden perceived "better level of care" for someone else in the system, would trigger an immediate dissatisfaction (equity theory, see section 3.1.2).

Figure 5-1: Gap between patient expectations and encounter

Gap in meeting patient expectations



Client input and complaints may be viewed as unmet needs or expectations may give key clues as to the prediction of satisfaction (dissatisfaction).



Figure 5-2: Exist survey overall satisfaction results - 1997 data

5.2 Results from focus groups

5.2.1 Users / Patients

The key themes that emerged from this group discussion addressed: medical doctor and medical facility reputation and competence are most important, recognition of consumer power and need for advocacy, and accountability, a need for family role in the care plan, holistic approach to treatment, the importance of ethical practice, need for more information about disease and treatment chosen, the importance of physical space and comprehensive provision of services at one location, convenience, and the importance of the complementarity between health professionals and equipment.

5.2.1.1 Patient focus group analysis

Users stressed throughout the session the human side of medicine, and the centrality of the relationship with the doctor and the staff to the care plan: “I expect the patient to be treated as a human being and not a number in the line up”. There were mixed views as to attributing blame on the staff in “problem” healthcare facilities. Some felt the staff “do not work hard to give attention to the patient as expected to please the patient”, while others expressed sympathy and understanding the “overworked” and “underpaid” staff.

The discussion on relationship with medical doctors included a notably higher level of sympathy for physicians as expressed in statements: “The public does not appreciate doctors’ efforts”, and “doctors need better assistants”.

There were many emotional statements made as to lack of attention to patients’ feelings and lives. The discussions around the causes for such a situation ranged from blaming this on absence of enforced national standards and regulations, to the “greed” in medicine.

This group of laypersons exhibited a great deal of interest in medical equipment and diagnostic facilities. Additionally, participants stressed the need for comprehensive (presence on one site) services to minimise patient travel.

Participants also noted the need for more individualised and unique care plans tailored for the specific patient needs.

Overall, participants exhibited a level of sophistication in both articulating their needs, as well as analysis of the root causes for the current “unacceptable” status quo in healthcare in the West Bank. While issues directly pertaining to the management systems of healthcare facilities were not often raised directly, it was evident that through a variety of proxy indicators, users do draw conclusions as to quality, benefits, and service utilisation intentions. Additionally, it was clear that participants link factors of adequate pay to staff and doctors, presence of appropriate regulations and standards, and continuing education for medical staff to quality of care and thus their own satisfaction. Users’ expectations and perceptions of factors such as: doctor and facility reputation, sophistication of equipment, cleanliness, time spent in consultation, extent of information given on case, etc. are processed and evaluative judgements are made in ranking facilities and care givers.

5.2.2 Staff

The central themes emerging from this group dealt with: self-esteem, labour issues, adequate pay, need for advancement opportunities, input into management decision-making, the need for more management support “while being on the front lines”, and need for continuing education.

5.2.2.1 Staff focus group analysis

Analysis from this group discussion reveals a concern for a host of issues related to working conditions and their impact on patient care and staff morale: “if the staff are not happy, then the patients are not happy”. This statement also implies recognition of their power within health organisations.

Additionally of interest are the repeated expressions of feelings of being marginalised by both management and doctors: “Management needs to consult with its staff”.

The findings can be grouped into several categories:

- ☐ Self esteem
- ☐ Pay scales and pay equity

- ☐ Benefits and labour issues
- ☐ Management relations
- ☐ Quality of patient care

Staff strongly felt that they were the ones on the “front lines” facing the frustration of dissatisfied patients: “patients can only vent their feelings on us”.

Analysis on the transcripts points to an alarming degree of job dissatisfaction seemingly caused by over-work, job and family related stress, feelings of lack of support, perceived low and un-equitable pay.

Staff exhibited a hypersensitivity to what is viewed as “selective application of policies” causing a sense of injustice within an organisation. This, they pointed out leads to “depression”.

Staff also repeatedly introduced issues dealing with lack of adequate pay, and thus their inability to provide acceptable standards of living for their families, and lack of opportunities for promotion and advancement.

One participant pointed, “Patients tend to focus on administrative and medical support issues and not clinical matters”. This likely recognises the limitations of patients in assessing the clinical care, and also patient reluctance to criticise doctors.

Overall, staff perceived themselves as the hardest working, and least recognised in the healthcare system. Moreover, feelings of helplessness to change the system were evident, yet this was coupled with a certain level of recognition of their own power within the system when it came to “addressing patients’ needs and satisfaction”. Management was viewed as not adequately and consistently addressing their needs and points view. Indeed, what they termed “selective application of organisational policy” points to definite perceptions of weakness in managerial decision making systems. It was also evident that this groups’ view of what contributes to quality healthcare was often limited to the setting of a single facility: an observation perhaps reflecting the very operational and focused nature of support staff.

5.2.3 Doctors

The significant themes emerging from this group dealt with the need for regulations, availability of medical equipment and technology, competence of support staff, extent of autonomy and authority, and continuing education.

5.2.3.1 Medical doctor focus group analysis

The results from this focus group can be categorised in a number of key areas doctors seemed to stress:

- ☐ Individualistic job satisfaction criteria
- ☐ Competence and cooperation from other staff
- ☐ Doctor-Patient relationship
- ☐ Availability and access to diagnostic tools and equipment
- ☐ Overall healthcare system as its impacts on access, ability to pay, and referrals
- ☐ Aspects related to physical facilities (space, amenities)

Issues directly and indirectly related to job satisfaction were consistently raised in most questions, even when the question was designed to address other factors.

The direct factors impacting on job satisfaction extracted from the discussion are:
The workload, pay and compensation for work, job security and cost of living increases.

The indirect factors impacting on job satisfaction extracted from all questions are:
Overall regulations, staff cooperation, ability to provide quality care, continuing education, access to consultants and specialists, and expanded role in management and decision-making (extent of doctor autonomy and authority).

Competence of & Relationship with support staff:

This issue was repeatedly referenced in relation to providing quality care and establishing good relationships with patients. Several times, doctors stressed that medical care is a “team effort”. In commenting about the status quo of clinical care nationally, several participants referred to the lack of experienced support personnel (in both medical and non-medical functions, and the obstacles this causes in delivery

of quality care. The relationship with the staff was also spoken of as an important contributor to good care: in terms of extent of cooperation with doctors and treatment of the patients.

National standards and regulatory mechanisms for “bad medicine”:

Doctors seemed demoralised and distressed over the inability of the “government” to “punish” negligence by certain providers. Some talked about the need for “self regulation”, others about “role of the ministry of health”. Some saw national regulations as a pre-requisite for any reform in the system.

Relationship with patients and that of patients to the medical facility:

Participants stressed the role of patient and family as a prerequisite to good care. Several aspects related to this issue can be extracted from the discussions; patient education and awareness, (including the family) were cited a number of times. The role patient expectations play in the relationship with doctors. Some stressed humane treatment of patients.

Another issue of prominence was the doctors’ awareness of patients’ ability or inability to pay for care and prescriptions. This seemed to rank highly on the doctors choice of facility to refer to, or prescription drug of choice.

Several participants expressed frustration at the poor inter-links between facilities making referral systems very ineffective and weak. One doctor said “that the most important thing for him is referring”.

Good quality diagnostic facilities were seen as key to accurate diagnosis and care plans. Both laboratory and imaging diagnostics in terms of equipment and quality of reporting of the results were cited as areas of need for development.

5.2.4 Overall

The overall findings from focus group work reinforce the hierarchy of medical institutions in which the doctor is perceived to be the central and most important figure to both the provision of quality care, and the reputation of the service facility.

All groups expressed a strong belief that the competence of the medical doctor is the most important central contributor to care.

Additionally, similarities existed between groups as to the relatively high level of importance given to equipment and technology. Even the patient group, who may not be well versed in this field, spoke of this repeatedly. This may reflect the nature of rapidly developing society and nation in which capital acquisition is always headline news and central to marketing strategies.

The three groups also stressed the importance of the physical environment in which care is provided as a contributor to quality. This may also be a reflection of prevalent under-development in infrastructure nations-wide.

Differences in points of view also could be observed from the transcripts. Staff tended to stress aspects related to job security, adequate pay, labour laws, benefit schemes, and status. Doctors, who are perhaps more affluent and view themselves as self-employed, spoke little of these issues. Instead they focused on work over load and the stress it may cause.

Doctors tended to present a more holistic view of the healthcare system and a need to have better inter-organisational linkages and referral procedures and systems; recognising the need for group and inter-facility collaboration and consultation.

A central theme emerging from the staff focus group is one of self-esteem. Many emotional comments were made about unappreciated management and doctor views and practices towards other staff. There was also a clear recognition of the role staff morale plays as a contributor to patient satisfaction.

Both doctor and staff groups did not explicitly articulate a role for patients in healthcare operations. Most participants tended to view patients as recipients of care, and not as active partners in its provision, although there seemed to be recognition of the importance of the patient-doctor relationship and the need to establish trust.

The user group expressed what might be viewed as a level of sophistication in recognition of consumer power, advocacy, and accountability issues. Generally, users

focused on the human side of medicine, but also with awareness and expressed need for quality of care, at least via proxy indicators of quality (doctor and facility reputation, sophistication of equipment, cleanliness, time spent in consultation, extent of information given on case, etc.).

Expressed user views also showed a tendency to place more blame on staff (than doctors) when problems arise in medical facilities affirming the view of the centrality of the medical doctor figure and the unique nature of the patient-doctor relationship as viewed by patients.

All three groups spoke of the need for continuing education in the field of healthcare as an important contributor to quality and personal satisfaction.

The findings from focus groups lend support to theories (see section 3.1) that explain dissatisfaction in terms of a mismatch of expectations versus perceived care received.

Additionally, internal dissonance (within healthcare organisations) and resulting discrepancy on issues between staff and management seemed to be a key contributor to dissatisfaction. Similar to the exit questionnaire results as well, there were expressions of needs for equity. Participants seemed to compare levels of care across organisations and even national boundaries.

Participants of focus group discussions clearly exhibited complex thinking and analysing processes that are critical of various aspects of the healthcare system. Issues emerging from such discussions were not captured in the exit questionnaires and household surveys.

Table 5-2: Comparative emerging themes from the three focus group discussions

Patients/Users	Doctors	Staff
<ul style="list-style-type: none"> ❑ Recognition of consumer power and need for advocacy, ❑ Accountability. ❑ Family role, ❑ Holistic approach, ❑ Ethics, ❑ Information about disease and treatment, ❑ Physical space ❑ Comprehensive care, ❑ Convenience, ❑ Complementarity between health professionals and equipment, ❑ Reputation and competence are most important 	<ul style="list-style-type: none"> ❑ Availability of medical equipment and technology, ❑ Competence of support staff ❑ Autonomy ❑ Authority ❑ Need for role in management ❑ Need for regulations ❑ Continuing education. 	<ul style="list-style-type: none"> ❑ Self-esteem, ❑ Personnel & labour issues ❑ Adequate pay issues, ❑ Need for advancement, ❑ Need for a role in management decision-making, ❑ Lack of management support while being on the front lines. ❑ Continuing Education

5.3 Household survey

This survey was conducted in respondents' households. Thus respondents may have been evaluating and assessing attributes from a more general sense of need and expectation, rather than being facility specific. Undoubtedly, previous experience, visits, and/or awareness of experiences of others play a role as well. Secondly respondents were asked to evaluate in a prospective sense:

“Imagine yourself in a future date as a user or visitor or patient in a clinic or hospital or medical centre -Please read the following table completely at first, and then mark the most important attributes to satisfy your needs in a descending order from 1 most important to 7 less important (mark your answers in the first column only)”.

The above phrasing was intended to illicit responses more in tune of respondent expectations and needs, rather than facility-specific assessment.

The list of 21 attributes contained several attributes that can be viewed as “country and/or culture specific”, namely:

1. Medical records keeping
2. Fees (cost) for service
3. Medical doctor adherence to appointments
4. Ability to take appointment over phone

Those attributes may be “taken for granted” in other more developed healthcare systems, but in the West Bank, they represent a “nice to have” category.

In the household survey, since the respondents were asked to both select top seven items (of a list of 21) and rank them (1 to 7); both the frequency of occurrence of a specific attribute, and the relative rank are of importance.

The mean was calculated for each attribute indicating the relative importance given to those attributes ranked at the lower end of the scale.

$$\text{Mean} = \text{Sum of values assigned to an attribute} / \text{total respondents selecting attribute}$$

The frequency of occurrence gives an indication as to users expectations that a particular attribute (or service) is desirable to have, the higher the frequency, the more desirable or “must have” an attribute is..

$$\text{Frequency} = \text{the number of occurrences for an attribute.}$$

The mean/frequency scale combines the two to generate an overall ranking of attributes and the expectations users may have.

$$\text{Relative overall weighting ratio} = \text{attribute Mean} / \text{attribute Frequency}$$

Thus in analysing the data, a weighting scale was used that is the result of the mean value divided by the frequency of occurrence.

Additionally, participants in all focus groups and the directors' survey utilised the same tool.

The mean/freq ratio, frequency only, and mean only ranking of the top attributes exhibited a high degree of overlap (except for "treatment by the staff") indicating sensitivity to all three measures of attribute importance to users.

The following Excel 2000 plots illustrate possible associations between how respondents ranked the attributes in terms of both frequency and mean versus gender, profession, age group, and residence.

Figure 5-3: Household survey attribute mean vs. gender

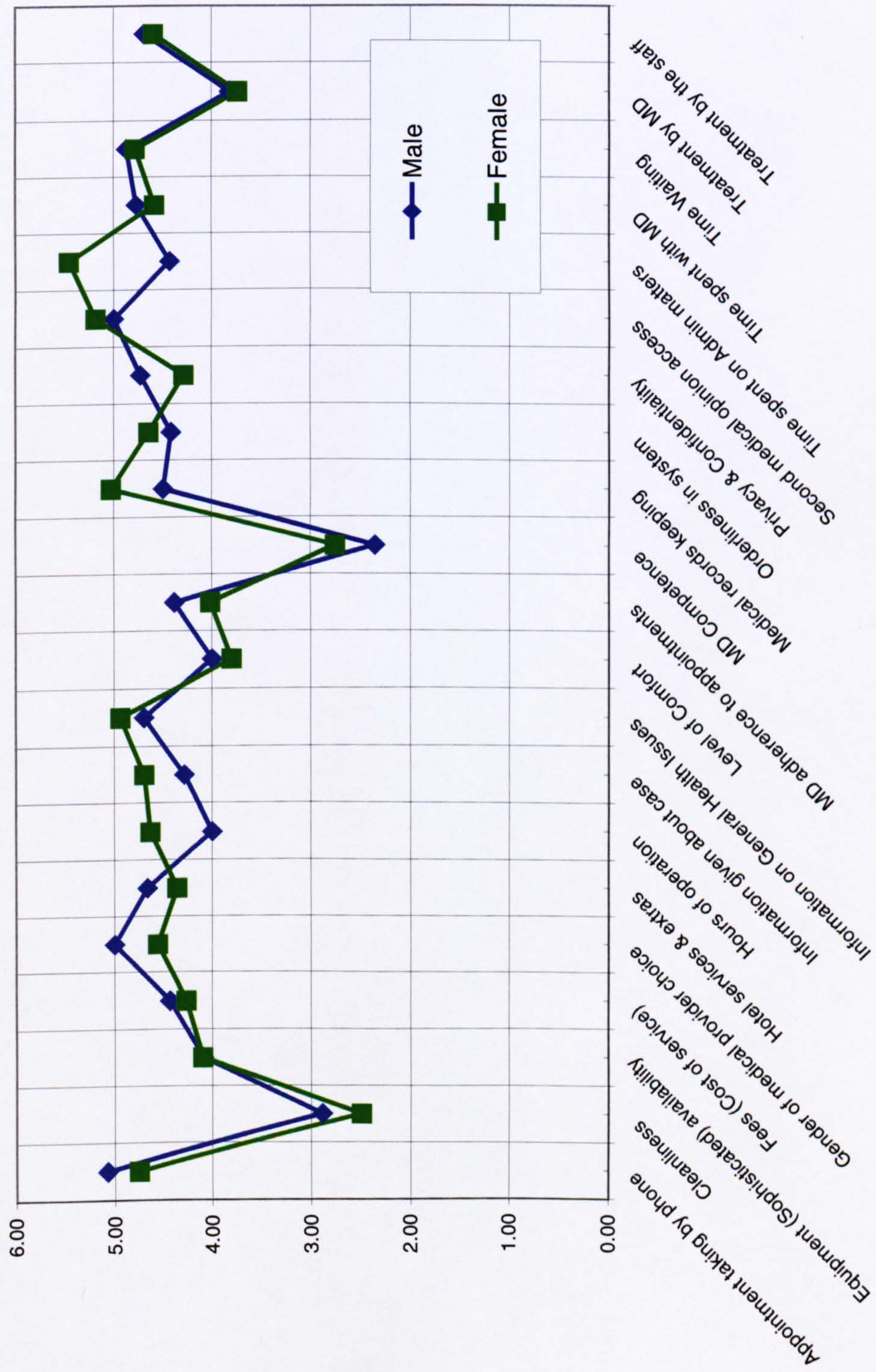


Figure 5-4: Household survey attributes frequency proportions vs. gender

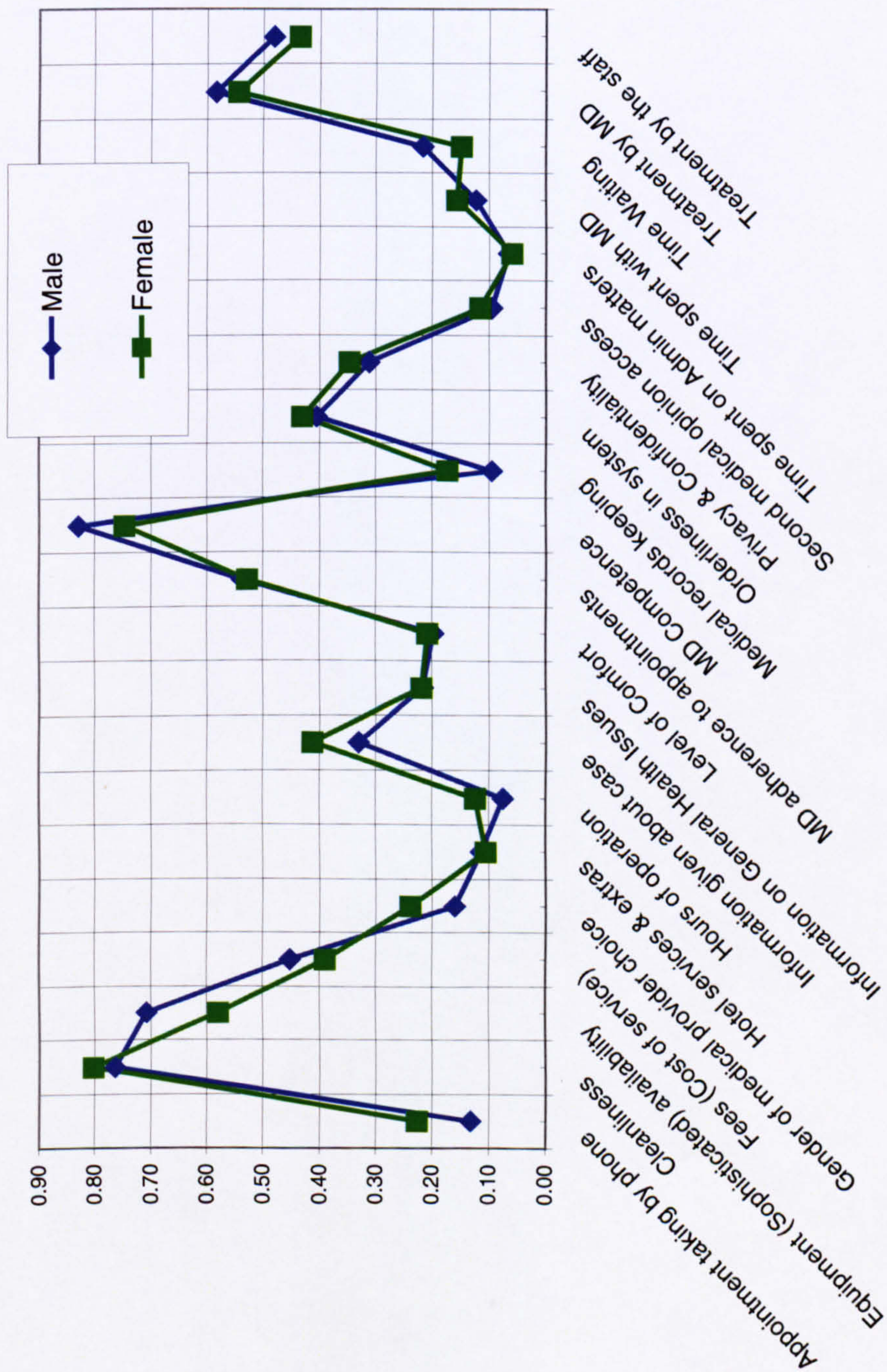


Figure 5-5: Household survey attributes frequency proportions vs. profession

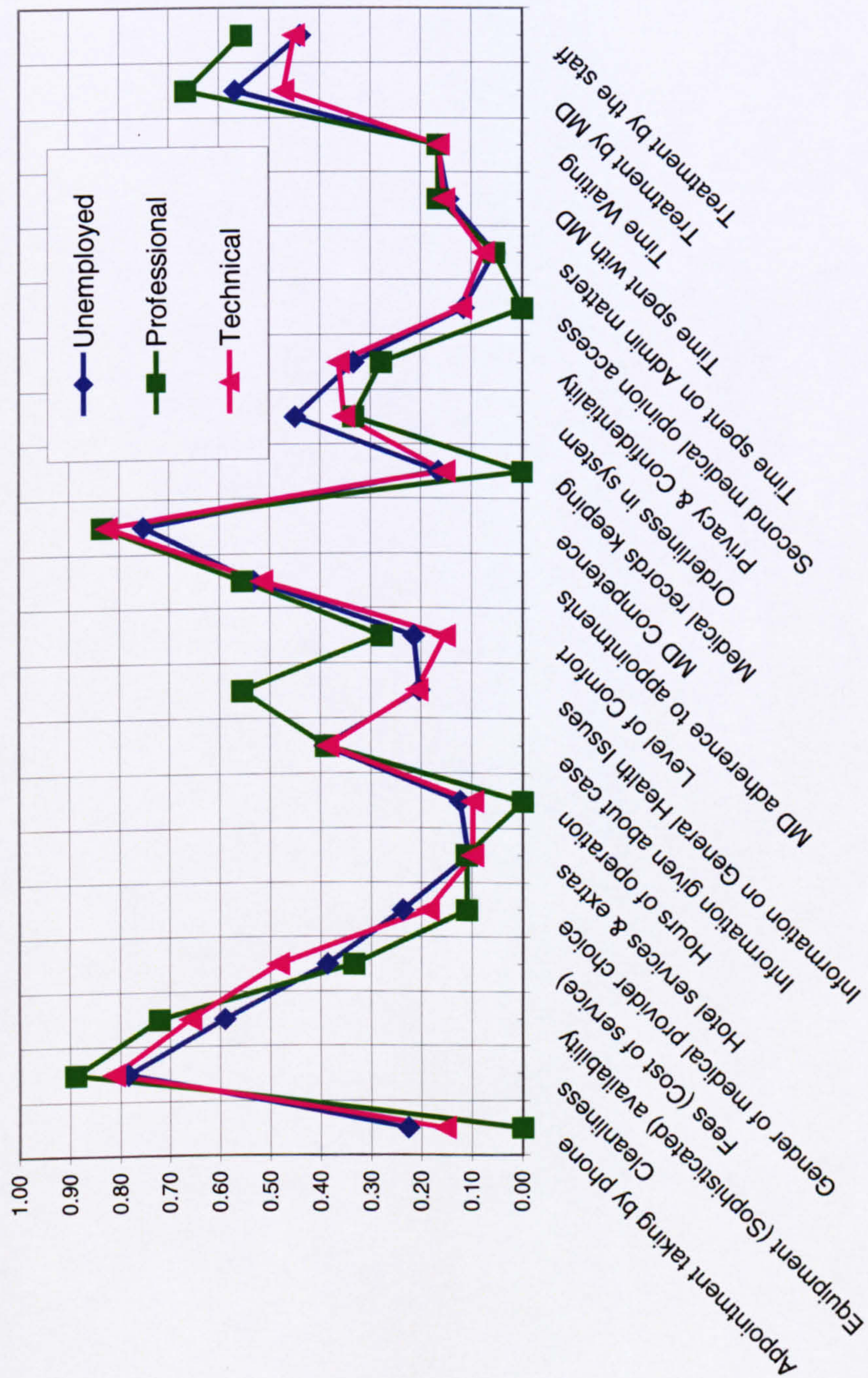


Figure 5-6: Household survey attributes mean vs. profession

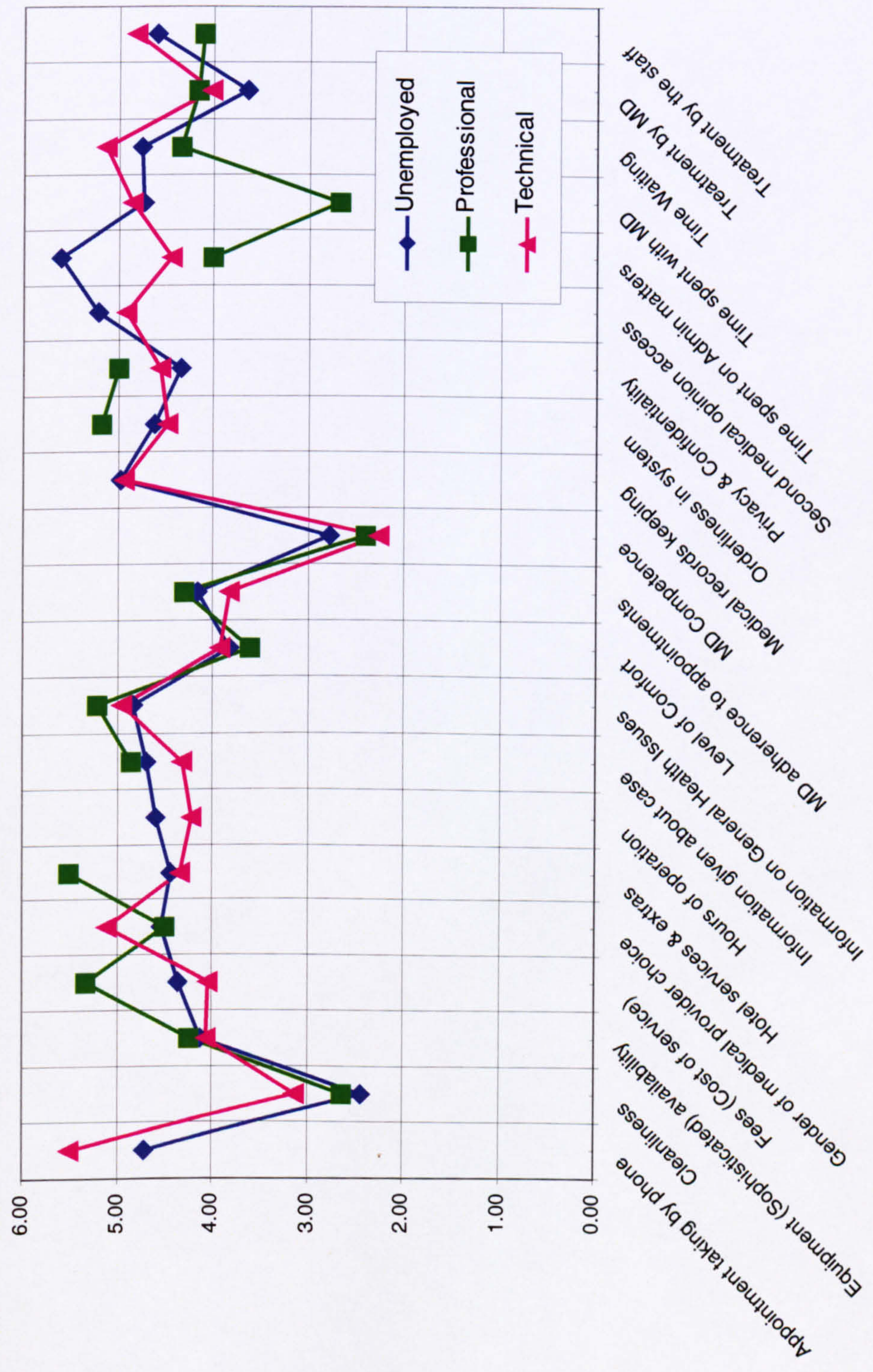


Figure 5-7: Household survey attributes mean vs. residence

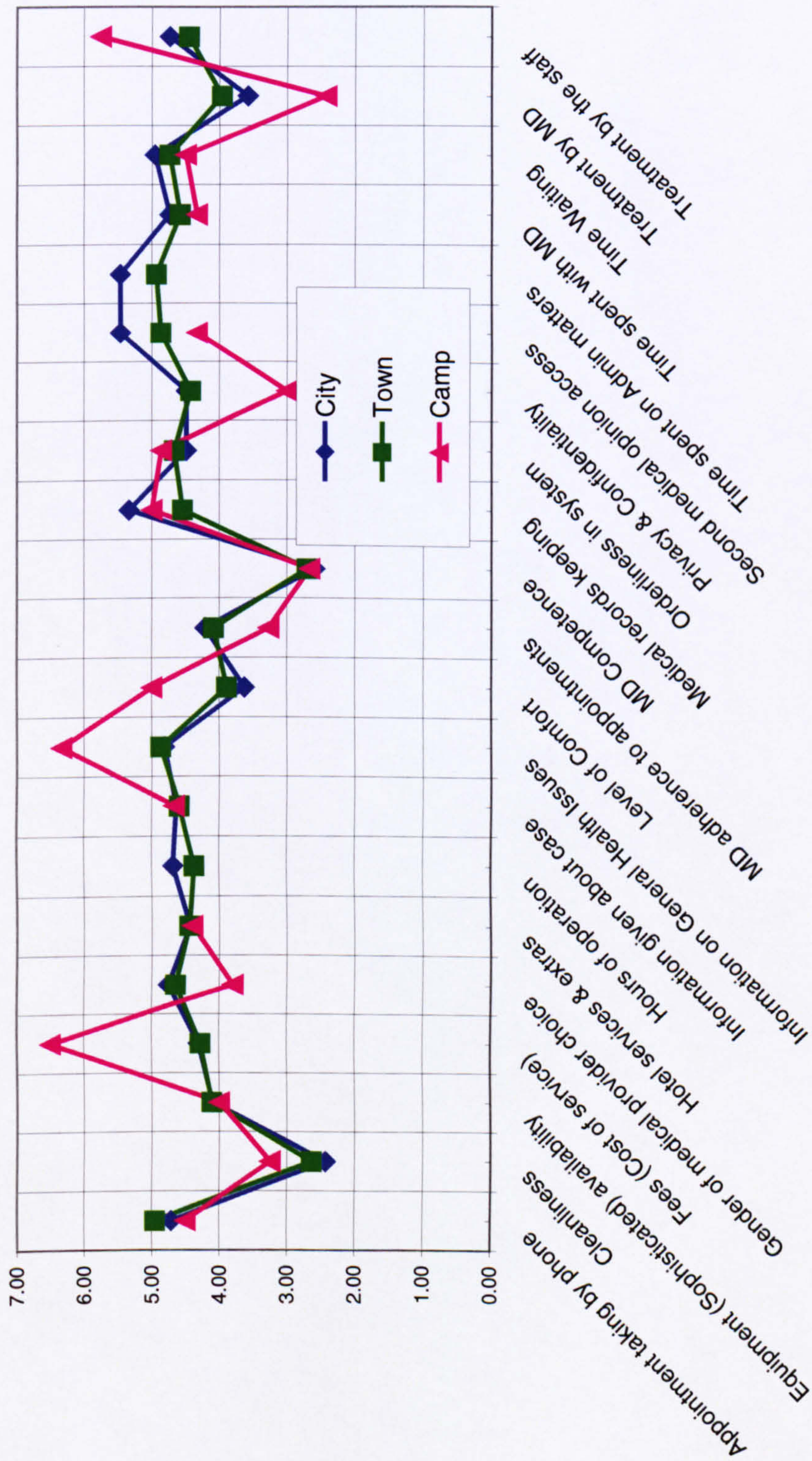


Figure 5-8: Household survey attributes frequency proportions vs. residence

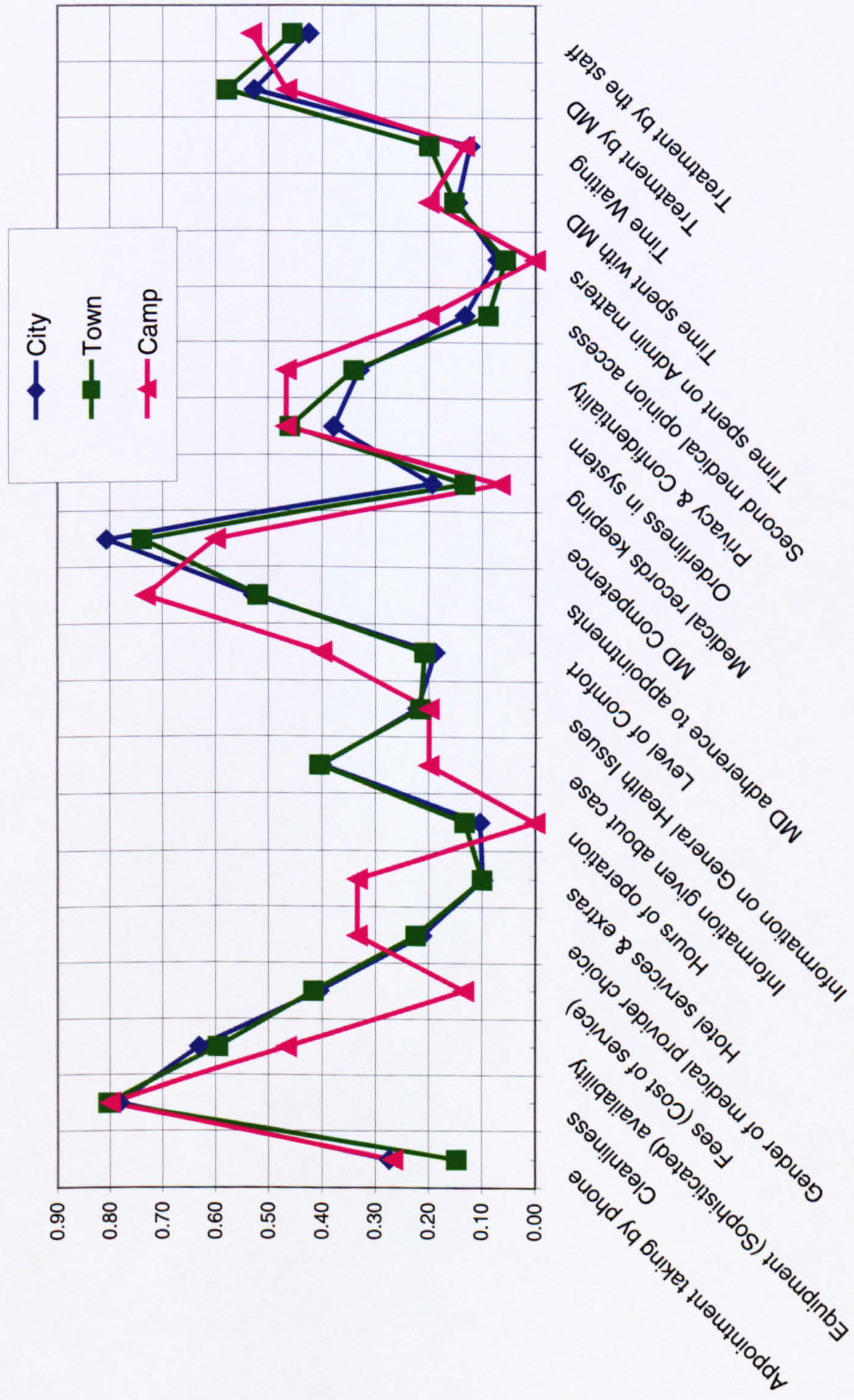


Figure 5-9: Household survey attributes mean vs. level of education

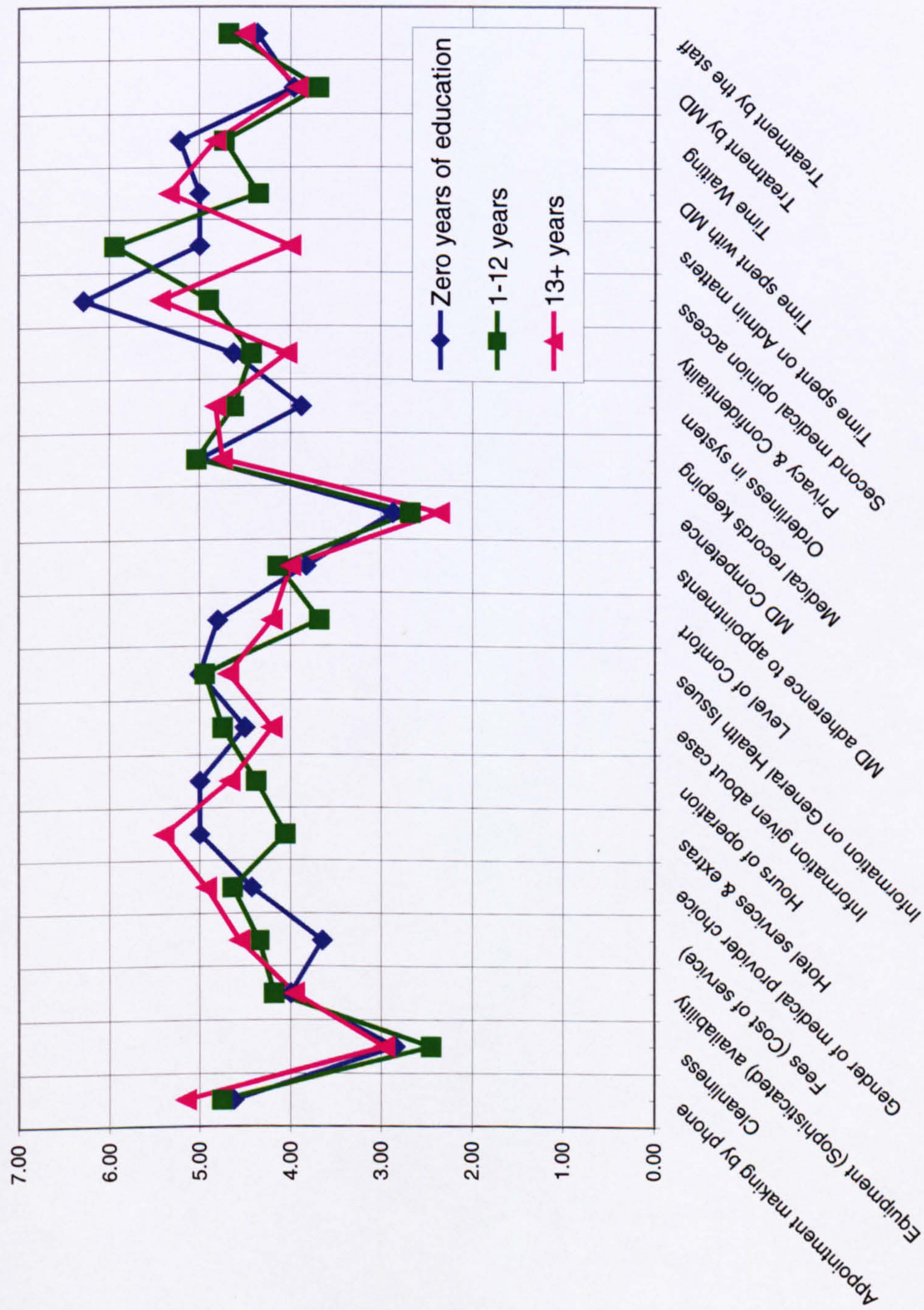


Figure 5-10: Household survey attributes frequency proportions vs. level of education

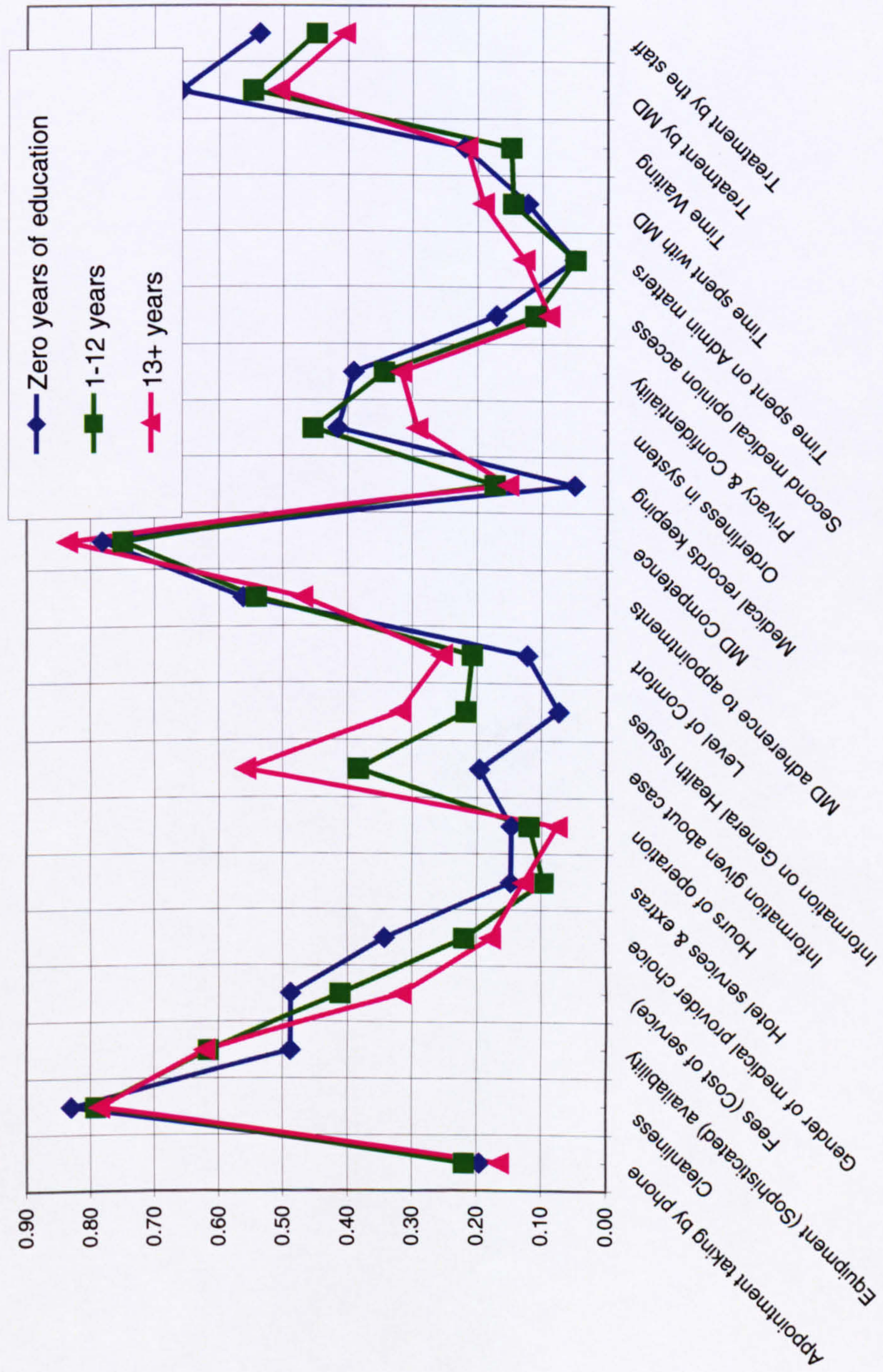


Figure 5-11: Household survey attributes mean vs. age group

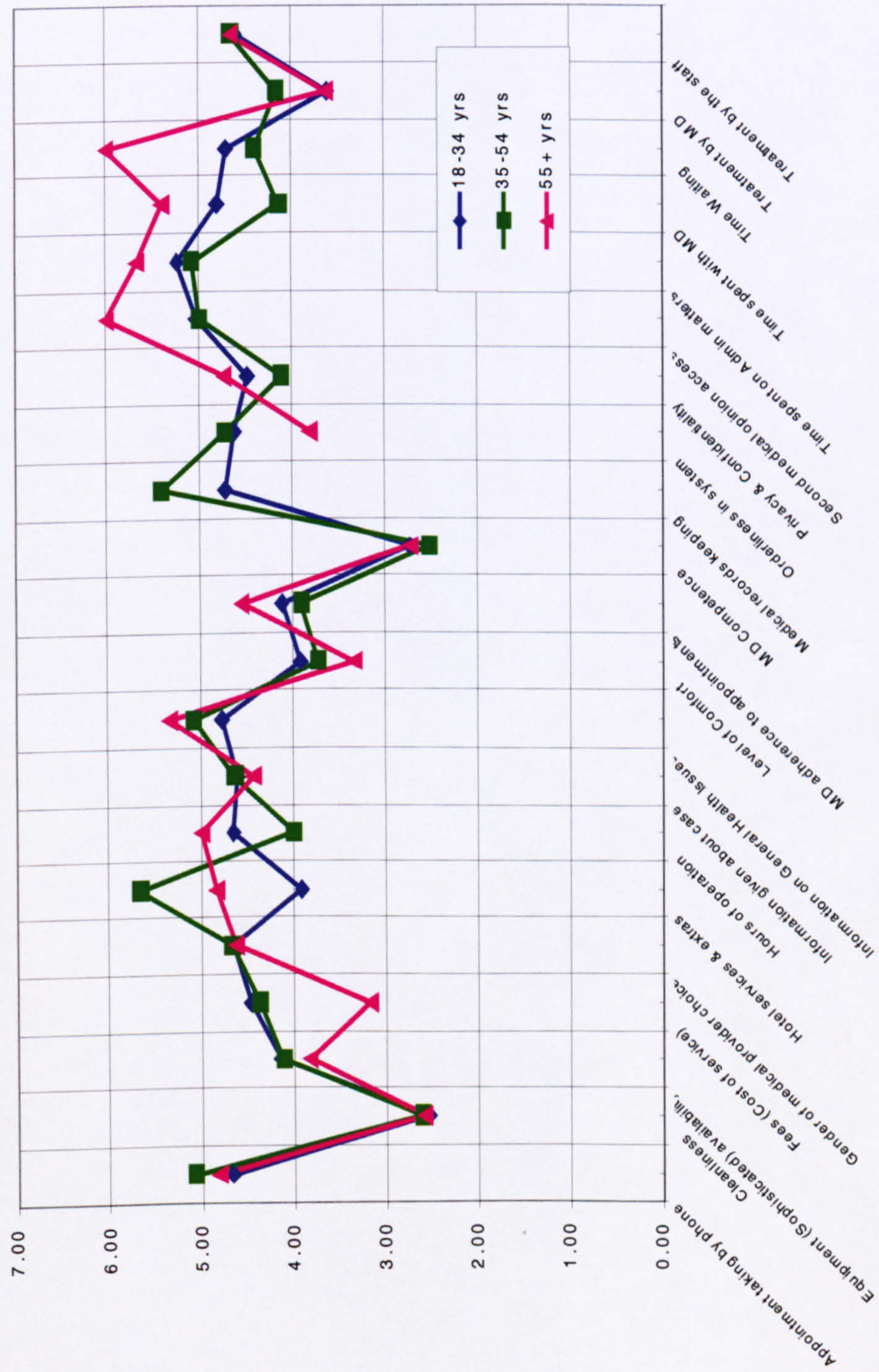
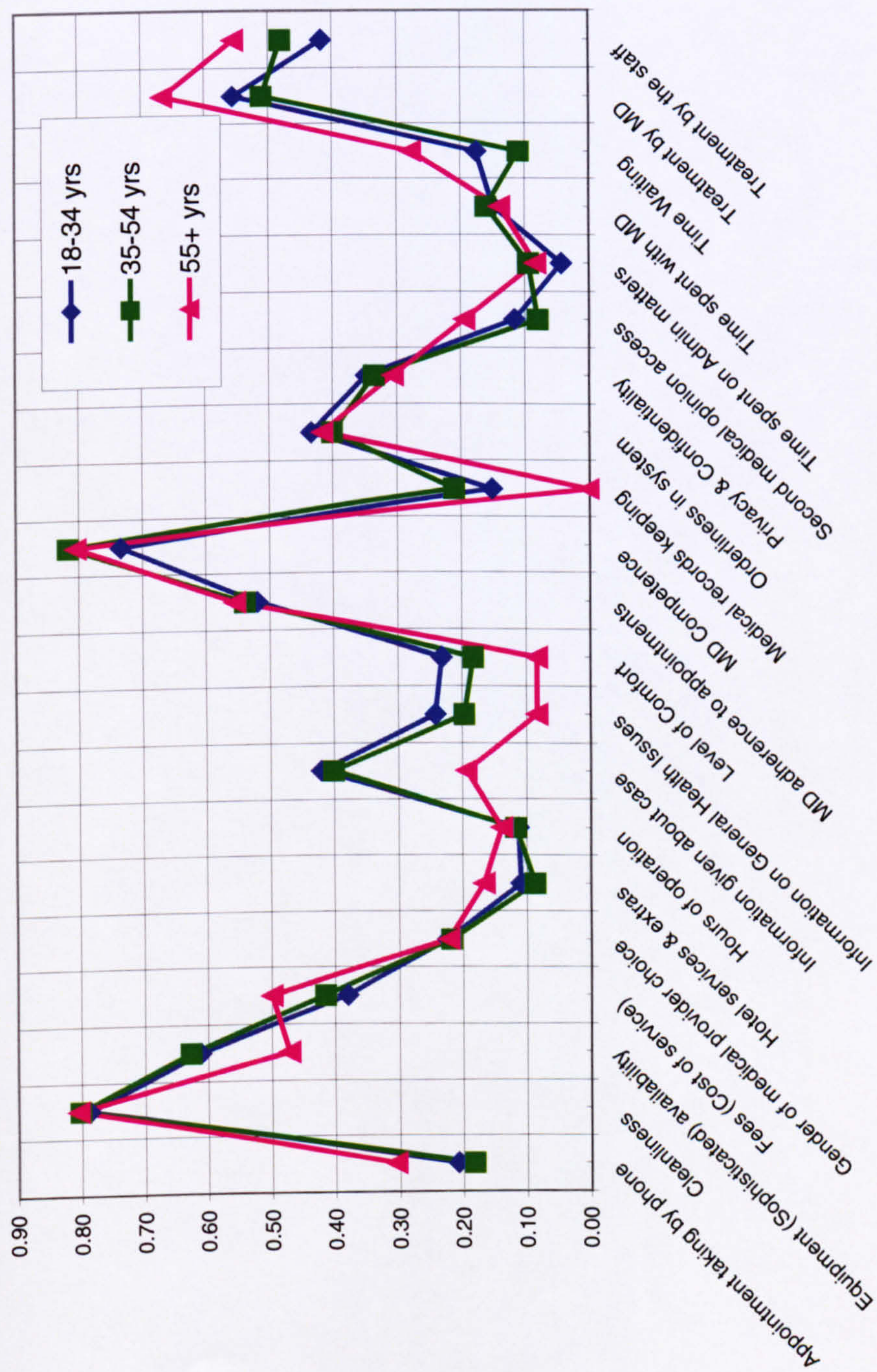


Figure 5-12: Household attributes frequency proportions vs. age group



Additionally, a table format developed for this data set and termed the “attribute hierarchy colour grid” is used to present findings. This grid below is utilised to assist in visual analysis of divergence or convergence when comparing relative rank across different methods and measurement tools. Each attribute is assigned one colour (i.e., cleanliness is always green across a row); it is then easier to observe data that does not fit the expected profile.

Six of the top seven attributes match on the three columns of mean/frequency, frequency, and mean. Thus indicating a high degree of consistency between the various statistical tools.

However, note the grid below shows the purple “treatment by staff” falling in rank from sixth in the first two columns, to thirteenth when attributes are sorted by mean. This could indicate that this particular attribute is of less overall importance when compared to the other top seven. By contrast, the white, “level of comfort” is ranked fourth on the “sorted by mean” column indicating a higher importance. And is fourteenth when sorted by frequency. Frequency may be viewed as the percent probability (belief strength) that a particular attribute is a component of satisfaction in a given population, while the mean may indicate valuation of belief strength associated with that attribute (see value-expectancy theory in section 3.1.1)

Table 5-3: Household survey, comparing attributes ranking mean/freq, freq, mean

	Sorted by Mean/Freq	Sorted by Frequency	Sorted by Mean
1	Cleanliness	Cleanliness	Cleanliness
2	MD Competence	MD Competence	MD Competence
3	Equipment (Sophisticated) availability	Equipment (Sophisticated) availability	Treatment by MD
4	Treatment by MD	Treatment by MD	Level of comfort
5	MD adherence to appointments	MD adherence to appointments	Equipment (Sophisticated) availability
6	Treatment by the staff	Treatment by the staff	MD adherence to appointments
7	Fees (Cost of service)	Orderliness in system	Fees (Cost of service)
8	Orderliness in system	Fees (Cost of service)	Privacy & Confidentiality
9	Information given about case	Information given about case	Hotel services & extras
10	Privacy & Confidentiality	Privacy & Confidentiality	Hours of operation
11	Level of comfort	Gender of medical provider choice	Orderliness in system
12	Gender of medical provider choice	Information on General Health Issues	Information given about case
13	Information on General Health Issues	Appointment taking by phone	Treatment by the staff
14	Appointment taking by phone	Level of comfort	Time spent with MD
15	Time Waiting	Time Waiting	Gender of medical provider choice
16	Time spent with MD	Medical records keeping	Appointment taking by phone
17	Medical records keeping	Time spent with MD	Time Waiting
18	Hours of operation	Hours of operation	Information on General Health Issues
19	Hotel services & extras	Second medical opinion access	Medical records keeping
20	Second medical opinion access	Hotel services & extras	Second medical opinion access
21	Time spent on Admin matters	Time spent on Admin matters	Time spent on Admin matters

Household Survey - Sorted by Mean/Freq. N=477

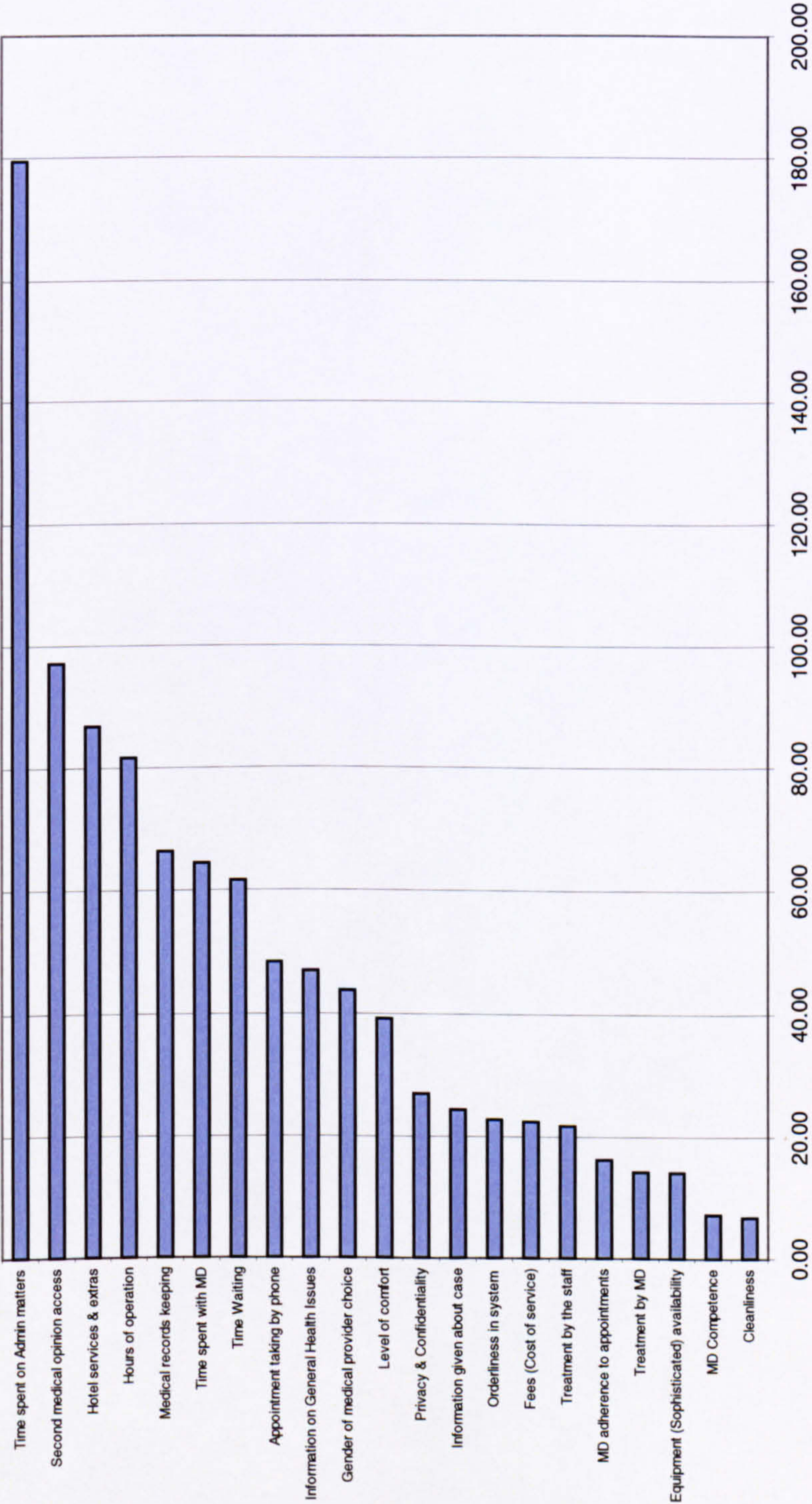


Figure 5-13: Household survey attributes sorted by mean/freq bar graph

Household Survey - Sorted by Mean N=477

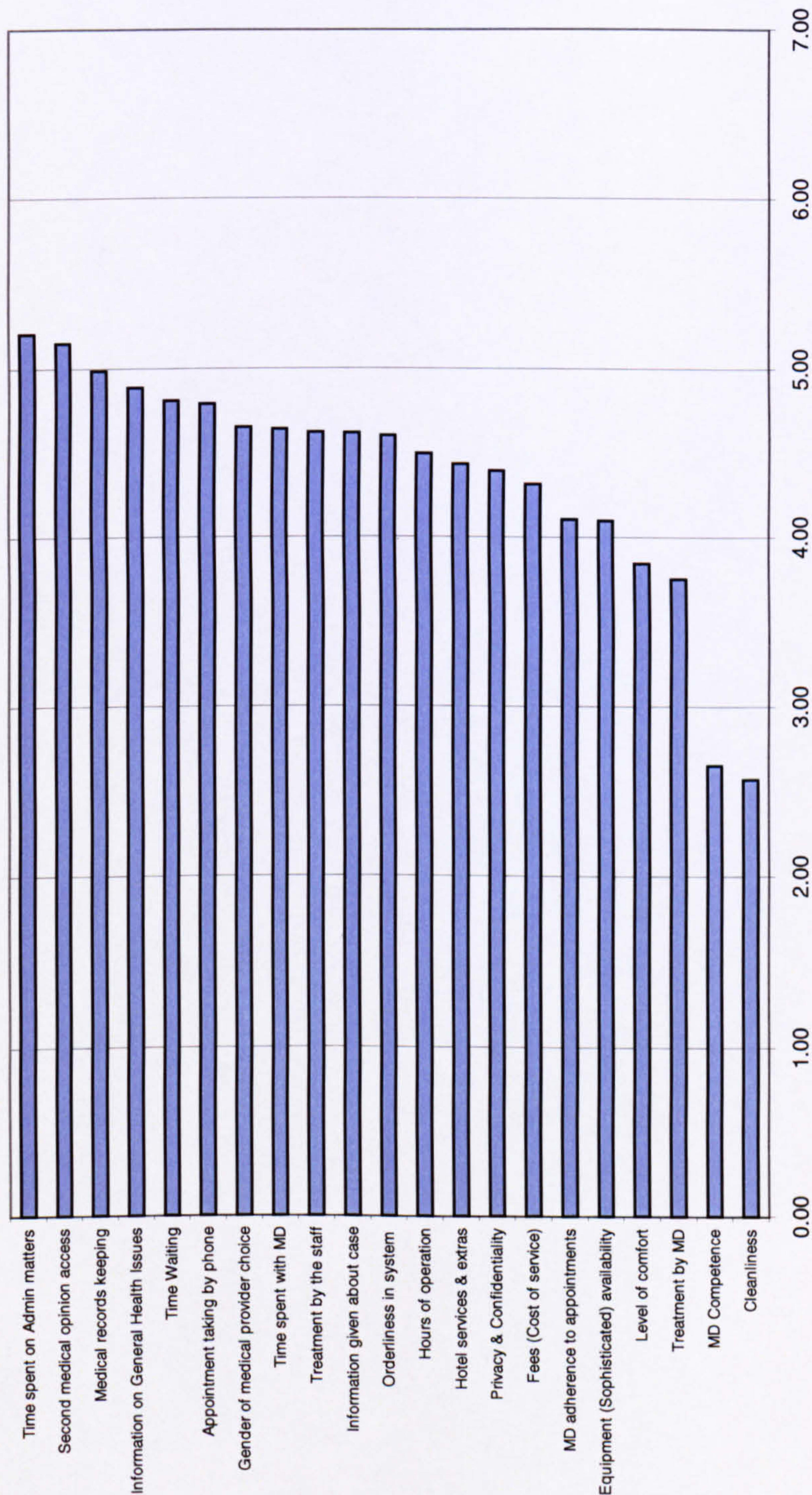


Figure 5-14: Household survey, attributes sorted by mean, bar graph

Household survey results - Sorted by Frequency Proportions N=477

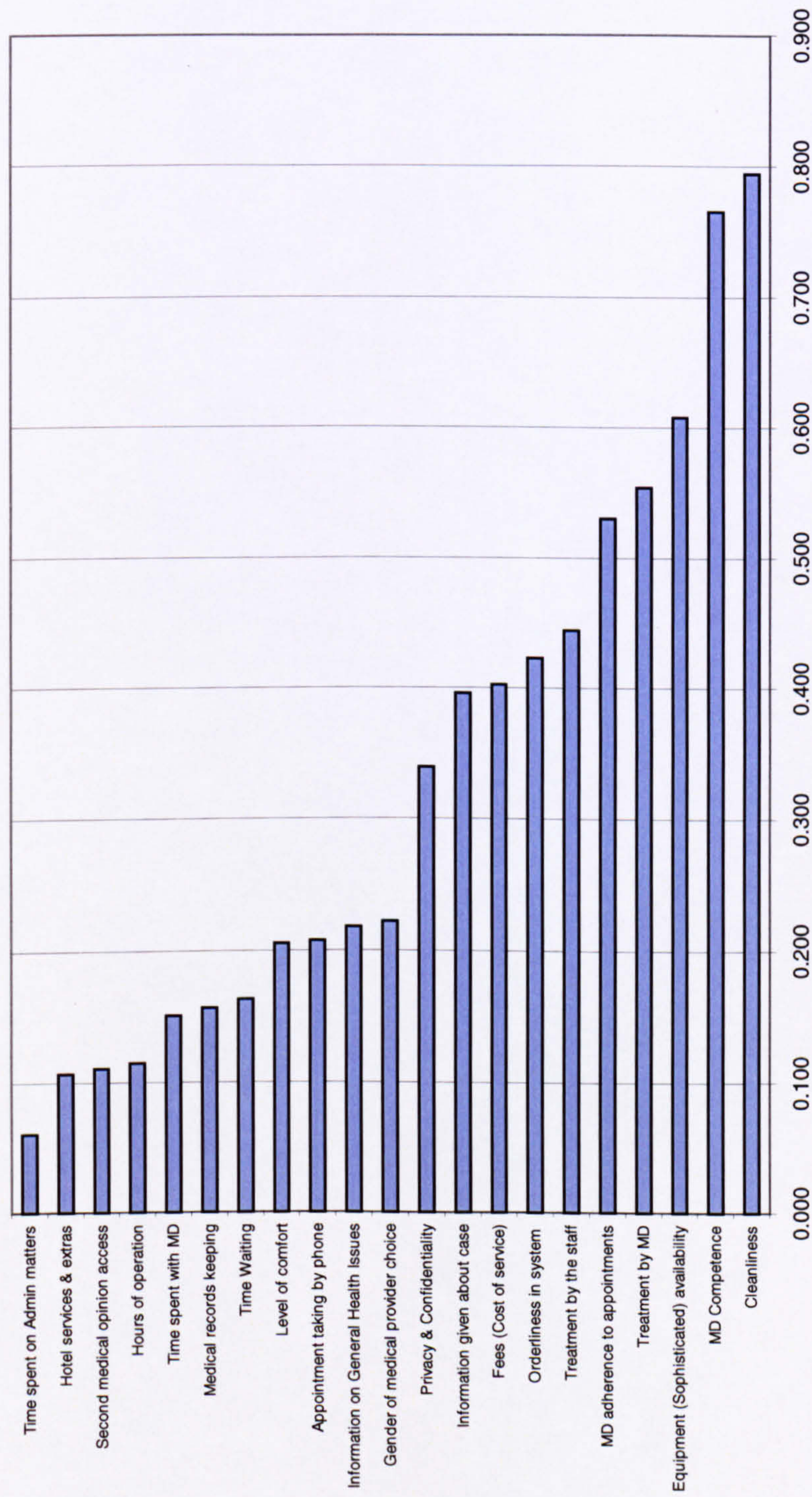


Figure 5-15: Household survey, attributes sorted by frequency proportions, bar graph

Household Survey N=477 - Top Seven Attributes
size of bubble= Frequency

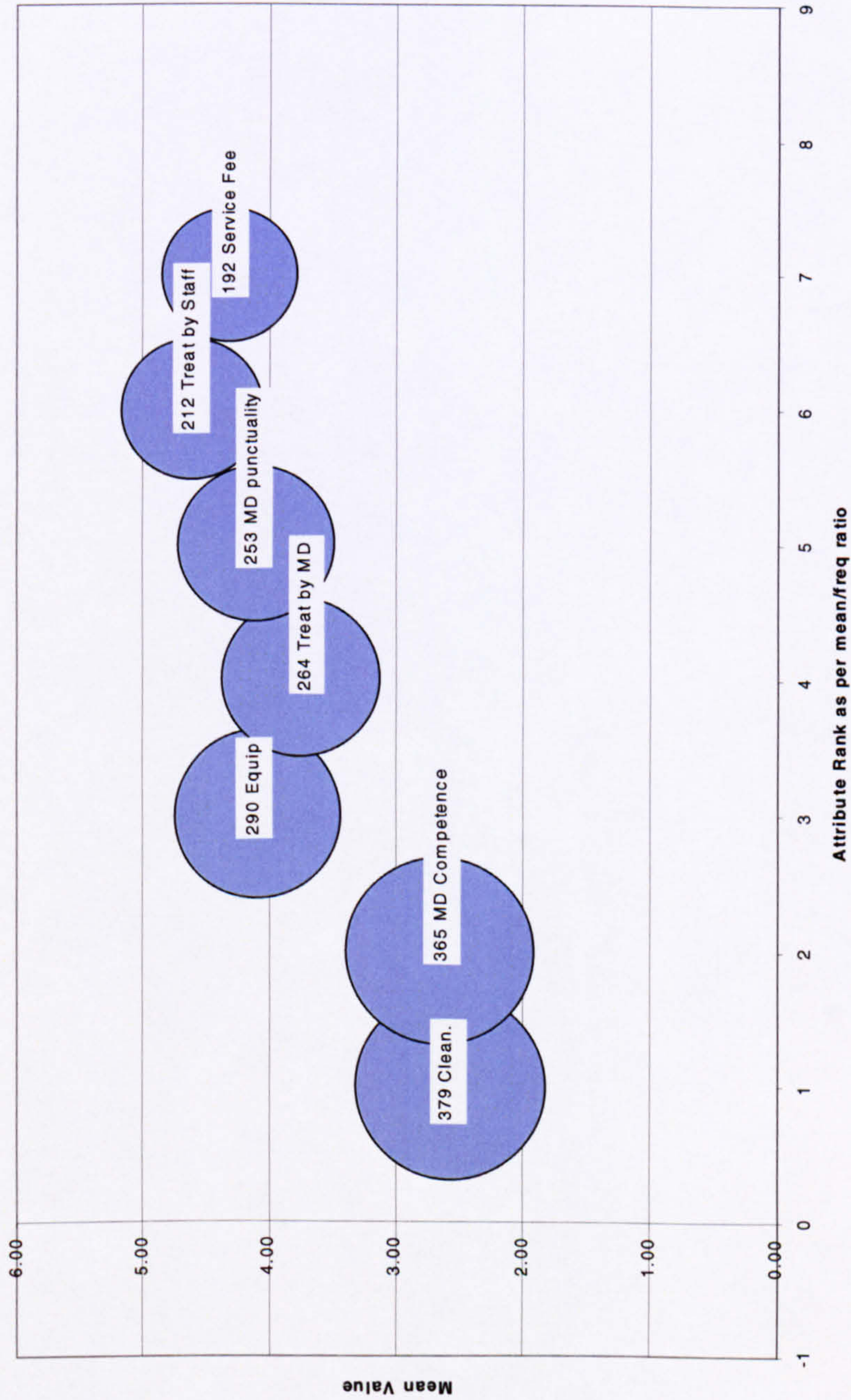


Figure 5-16: Household survey, Bubble plot of top 7 attributes on mean/freq ratio

The data are best displayed to convey information in both the attribute hierarchy colour grid, and bubble plot above. The bubble chart illustrates attributes frequency (proportional to bubble diameter) and mean (Y axis). It can be readily observed how attribute ranked three by mean/freq ratio (equipment) with a frequency of 290 and a mean value of approx. 4 compares to attribute “Treatment by MD” which get a lower ranking on the mean/freq ratio, but has a higher mean value possibly indicating stronger association with satisfaction.

When the results of each attribute are plotted on histograms (figures 5.17 to 5.20), it is easy to observe the relative importance given. Skewness to the left indicates an attribute that was ranked as highly important, skewness to the right, indicates less importance, and a central peak indicates a ranking in between.

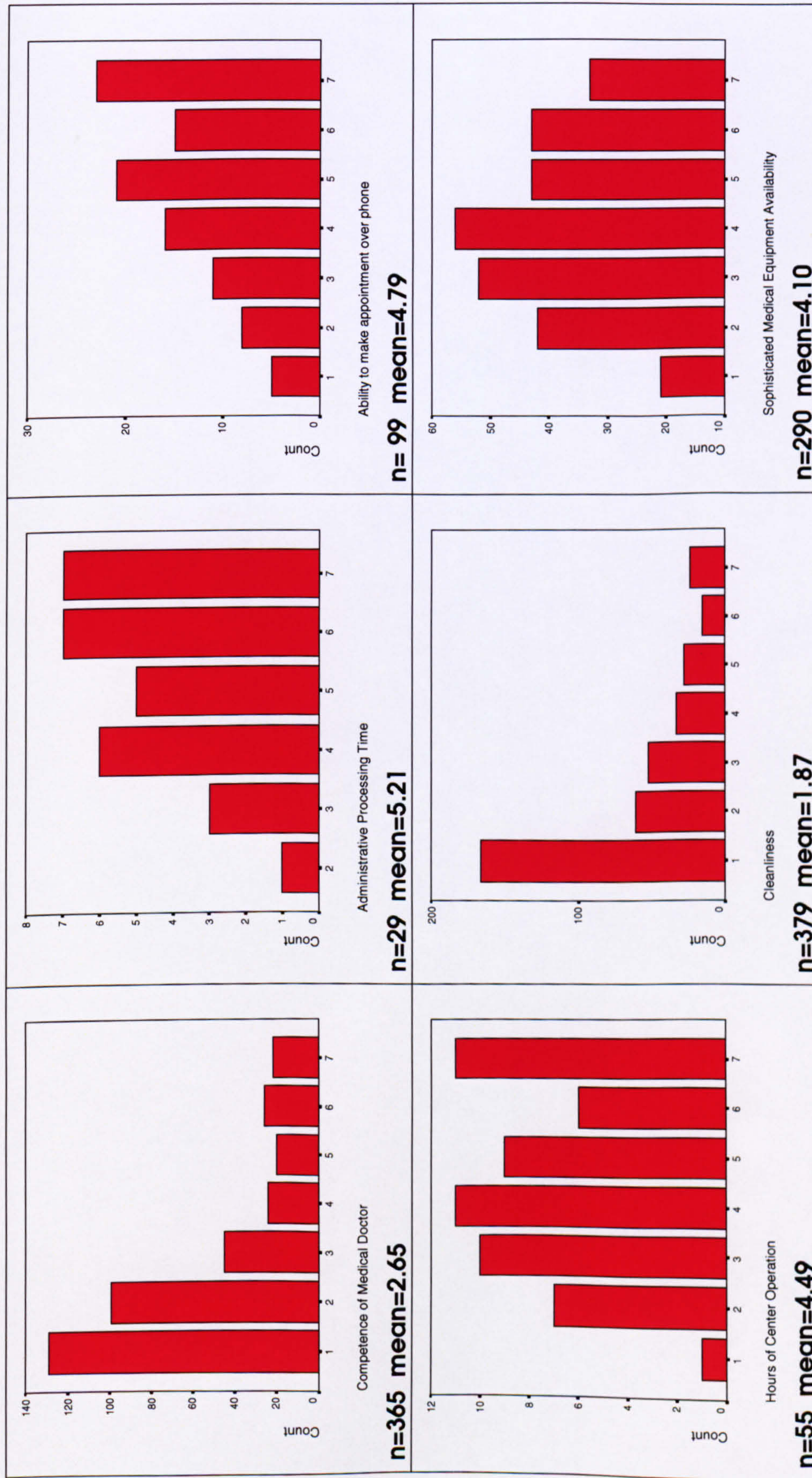


Figure 5-17: Household survey, attribute histograms 1

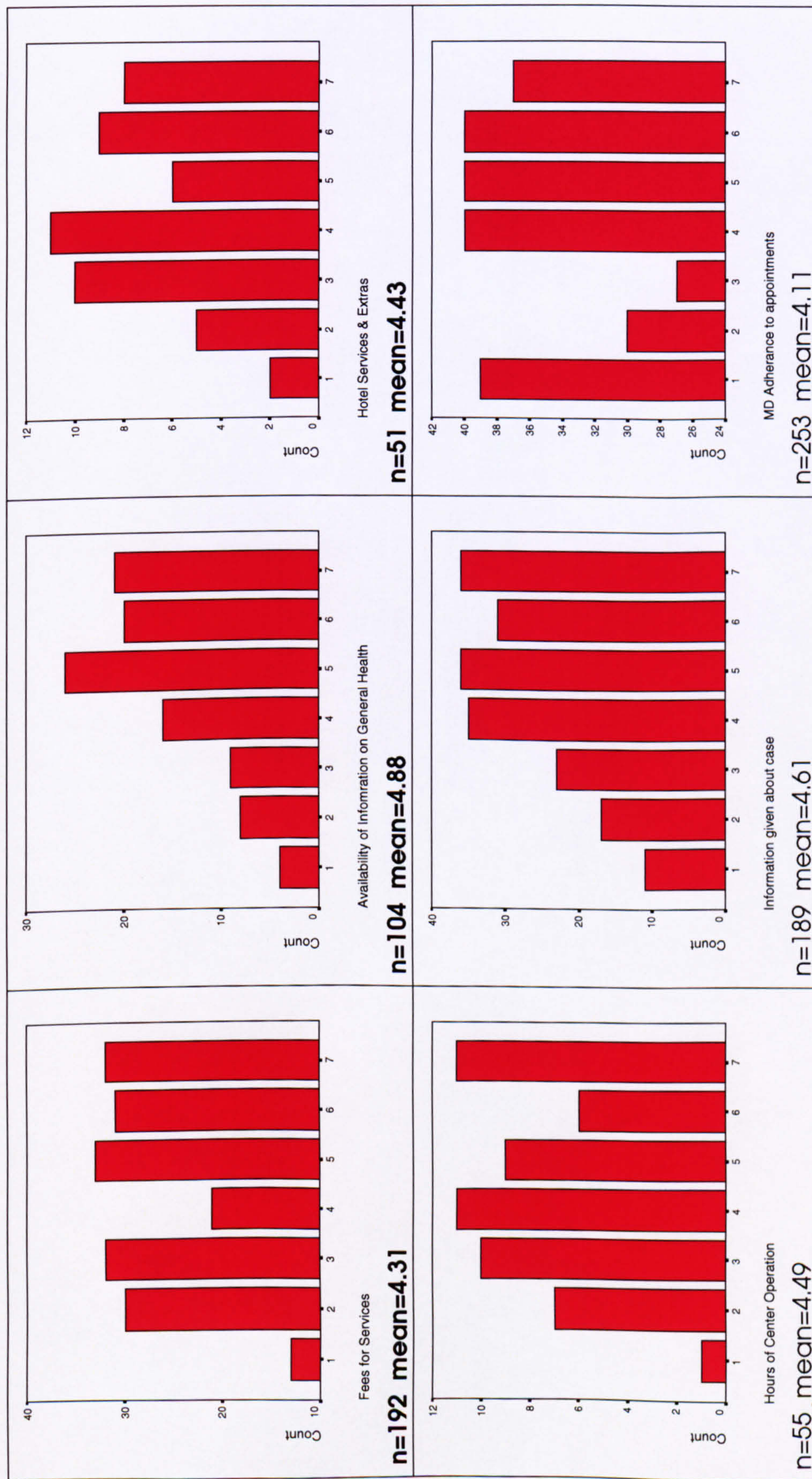


Figure 5-18: Household survey, attribute histograms 2

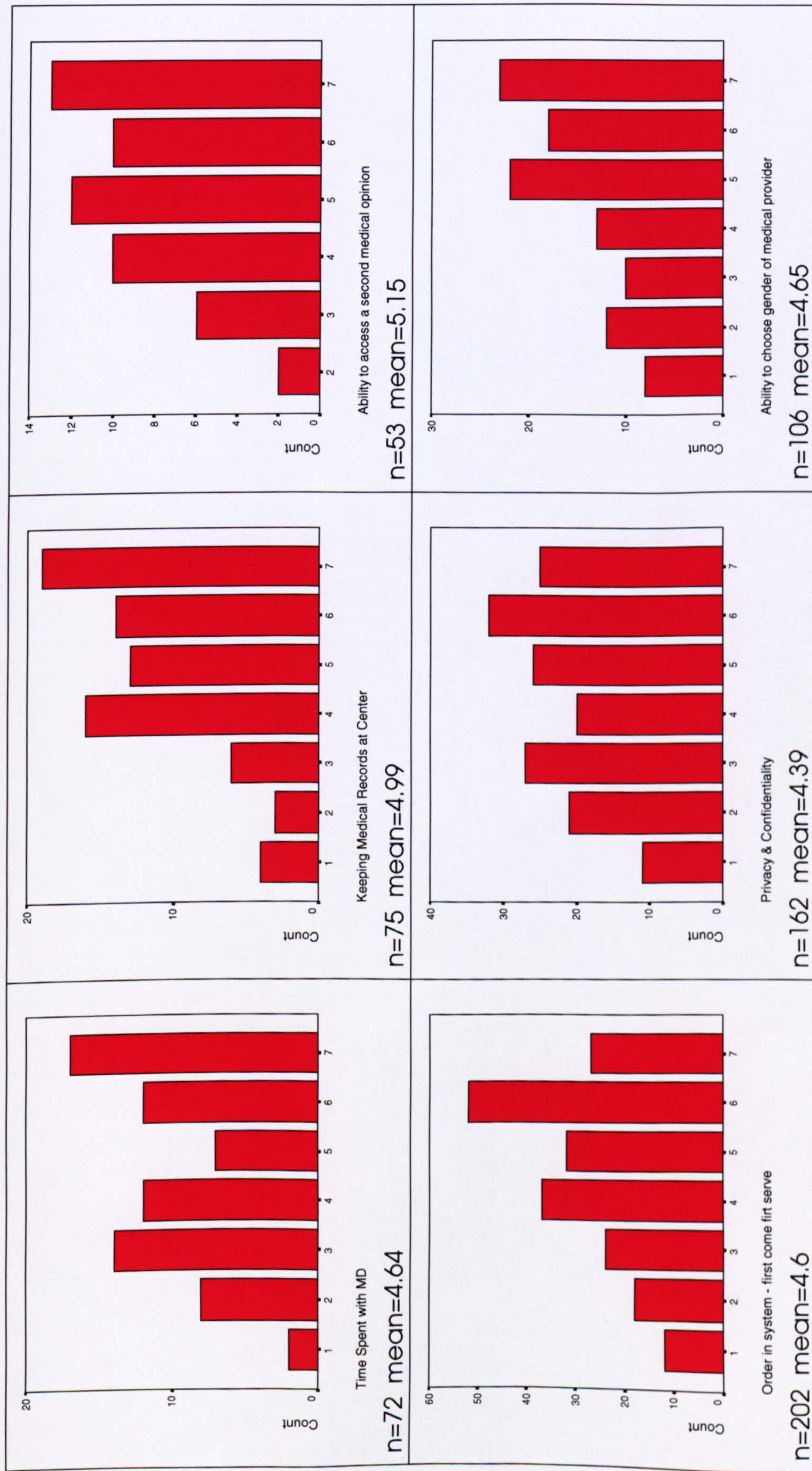


Figure 5-19: Household survey, attribute histograms 3

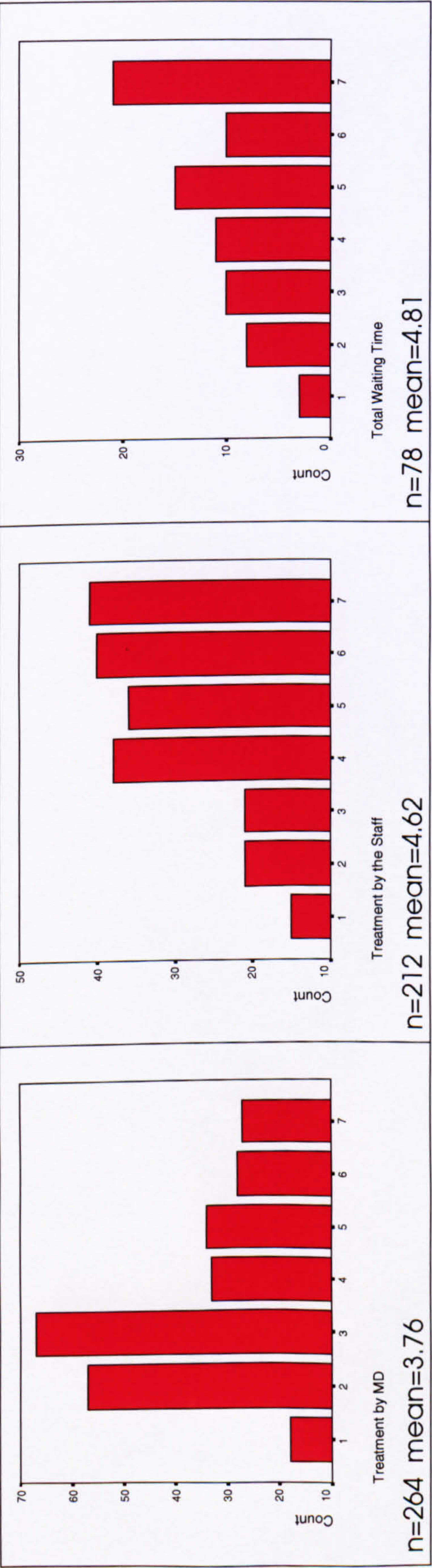


Figure 5-20: Household survey, attribute histograms 4

5.4 Comparing “views” on attributes of patient satisfaction

The attribute hierarchy colour grid is used below (figure 5.6) to highlight the extent of overlap and/or disparity from the viewpoints of the groups involved, as to what contributes to patient satisfaction. All columns are sorted by the mean/freq ratio. The first table simply lists the ranking of the 21 known attributes of satisfaction as viewed by each group named in the column heading. Each subsequent table (figures 5.6 to 5.9) examines the data from the viewpoint of one group (users, staff, doctors, and administrators). This series is followed by a series of bar graphs showing the attribute ranking for each group. Again it is important to note that the ranking does *not* yield any information as to order of magnitude of importance. Indeed, given the nature of focus groups (small numbers), and from a statistical significance point of view, results should be interpreted with caution. However, this relative ranking may be strongly indicative of current population/individual expectations and needs.

This table is a simple listing of the ranking of patient satisfaction attributes as viewed by each of the groups (users, staff, doctors, directors/administrators). It is difficult to extract any useful information from such a presentation. However, addition of the colour grid (in the subsequent tables) will shed some light variations of interest to management.

Table 5-5: Comparing attribute ranking for all groups

	Sorted by Mean/Freq	N=7	N=6	N=8	n-14
	Users (Household)	Users (Focus Group)	Staff	MDs	Direct/Admin
1	Cleanliness	MD Competence	MD Competence	Treatment by MD	MD Competence
2	MD Competence	Equipment (Sophisticated) availability	Treatment by MD	MD Competence	Fees (Cost of service)
3	Equipment (Sophisticated) availability	Treatment by MD	Equipment (Sophisticated) availability	Fees (Cost of service)	Equipment (Sophisticated) availability
4	Treatment by MD	Privacy & Confidentiality	Cleanliness	Equipment (Sophisticated) availability	Treatment by the staff
5	MD adherence to appointments	Information given about case	Treatment by the staff	Cleanliness	Treatment by MD
6	Treatment by the staff	Cleanliness	Information given about case	Treatment by the staff	MD adherence to appointments
7	Fees (Cost of service)	Fees (Cost of service)	Fees (Cost of service)	Hours of operation	Privacy & Confidentiality
8	Orderliness in system	Information on General Health Issues	Privacy & Confidentiality	Level of comfort	Information given about case
9	Information given about case	Treatment by the staff	Time spent on Admin matters	Gender of medical provider choice	Orderliness in system
10	Privacy & Confidentiality	Orderliness in system	MD adherence to appointments	Second medical opinion access	Cleanliness
11	Level of comfort	MD adherence to appointments	Information on General Health Issues	Privacy & Confidentiality	Information on General Health Issues
12	Gender of medical provider choice	Level of comfort	Orderliness in system	Information given about case	Time spent on Admin matters
13	Information on General Health Issues	Time spent on Admin matters	Level of comfort	MD adherence to appointments	Level of comfort
14	Appointment taking by phone	Second medical opinion access	Time Waiting	Time spent with MD	Time Waiting
15	Time Waiting	Time Waiting	Hours of operation	Hotel services & extras	Hours of operation
16	Time spent with MD	Hours of operation	Hotel services & extras	Time Waiting	Hotel services & extras
17	Medical records keeping	Hotel services & extras	Time spent with MD	Time spent on Admin matters	Time spent with MD
18	Hours of operation	Time spent with MD	Appointment taking by phone	Medical records keeping	Appointment taking by phone
19	Hotel services & extras	Appointment taking by phone	Medical records keeping	Appointment taking by phone	Medical records keeping
20	Second medical opinion access	Medical records keeping	Second medical opinion access	Orderliness in system	Second medical opinion access
21	Time spent on Admin matters	Gender of medical provider choice	Gender of medical provider choice	Information on General Health Issues	Gender of medical provider choice

User patient ranking of the attributes (first two columns) varied slightly between the two instruments (household survey & focus group). This is not unexpected given the nature of the focus groups in which results may be strongly influenced by one or more participants, or the in depth

discussions often observed which tend to sway opinions. What is immediately evident is the extent of overlap as how all groups rank attributes of patient/user satisfaction. Secondly, doctors and directors tend to give more weight to “cost of service” (red) that do the users and staff. Doctors did not perceive their own punctuality as important a contributor as did users and directors.

Table 5-6: Comparing attribute ranking from user point of view

	Users (Household)	Users (Focus Group)	Staff	MDs	Direct/Admin
1	Cleanliness	MD Competence	MD Competence	Treatment by MD	MD Competence
2	MD Competence	Equipment (Sophisticated) availability	Treatment by MD	MD Competence	Fees (Cost of service)
3	Equipment (Sophisticated) availability	Treatment by MD	Equipment (Sophisticated) availability	Fees (Cost of service)	Equipment (Sophisticated) availability
4	Treatment by MD	Privacy & Confidentiality	Cleanliness	Equipment (Sophisticated) availability	Treatment by the staff
5	MD adherence to appointments	Information given about case	Treatment by the staff	Cleanliness	Treatment by MD
6	Treatment by the staff	Cleanliness	Information given about case	Treatment by the staff	MD adherence to appointments
7	Fees (Cost of service)	Fees (Cost of service)	Fees (Cost of service)	Hours of operation	Privacy & Confidentiality
8	Orderliness in system	Information on General Health Issues	Privacy & Confidentiality	Level of comfort	Information given about case
9	Information given about case	Treatment by the staff	Time spent on Admin matters	Gender of medical provider choice	Orderliness in system
10	Privacy & Confidentiality	Orderliness in system	MD adherence to appointments	Second medical opinion access	Cleanliness
11	Level of comfort	MD adherence to appointments	Information on General Health Issues	Privacy & Confidentiality	Information on General Health Issues
12	Gender of medical provider choice	Level of comfort	Orderliness in system	Information given about case	Time spent on Admin matters
13	Information on General Health Issues	Time spent on Admin matters	Level of comfort	MD adherence to appointments	Level of comfort
14	Appointment taking by phone	Second medical opinion access	Time Waiting	Time spent with MD	Time Waiting
15	Time Waiting	Time Waiting	Hours of operation	Hotel services & extras	Hours of operation
16	Time spent with MD	Hours of operation	Hotel services & extras	Time Waiting	Hotel services & extras
17	Medical records keeping	Hotel services & extras	Time spent with MD	Time spent on Admin matters	Time spent with MD
18	Hours of operation	Time spent with MD	Appointment taking by phone	Medical records keeping	Appointment taking by phone
19	Hotel services & extras	Appointment taking by phone	Medical records keeping	Appointment taking by phone	Medical records keeping
20	Second medical opinion access	Medical records keeping	Second medical opinion access	Orderliness in system	Second medical opinion access
21	Time spent on Admin matters	Gender of medical provider choice	Gender of medical provider choice	Information on General Health Issues	Gender of medical provider choice

The key issues emerging from the table below are how directors' views appear to diverge as to the importance of "cost of service" (red) and "cleanliness" (white).

Table 5-7: Comparing attribute ranking from Admin Directors point of view

	Users (Household)	Users (Focus Group)	Staff	MDs	Direct/Admin
1	Cleanliness	MD Competence	MD Competence	Treatment by MD	MD Competence
2	MD Competence	Equipment (Sophisticated) availability	Treatment by MD	MD Competence	Fees (Cost of service)
3	Equipment (Sophisticated) availability	Treatment by MD	Equipment (Sophisticated) availability	Fees (Cost of service)	Equipment (Sophisticated) availability
4	Treatment by MD	Privacy & Confidentiality	Cleanliness	Equipment (Sophisticated) availability	Treatment by the staff
5	MD adherence to appointments	Information given about case	Treatment by the staff	Cleanliness	Treatment by MD
6	Treatment by the staff	Cleanliness	Information given about case	Treatment by the staff	MD adherence to appointments
7	Fees (Cost of service)	Fees (Cost of service)	Fees (Cost of service)	Hours of operation	Privacy & Confidentiality
8	Orderliness in system	Information on General Health Issues	Privacy & Confidentiality	Level of comfort	Information given about case
9	Information given about case	Treatment by the staff	Time spent on Admin matters	Gender of medical provider choice	Orderliness in system
10	Privacy & Confidentiality	Orderliness in system	MD adherence to appointments	Second medical opinion access	Cleanliness
11	Level of comfort	MD adherence to appointments	Information on General Health Issues	Privacy & Confidentiality	Information on General Health Issues
12	Gender of medical provider choice	Level of comfort	Orderliness in system	Information given about case	Time spent on Admin matters
13	Information on General Health Issues	Time spent on Admin matters	Level of comfort	MD adherence to appointments	Level of comfort
14	Appointment taking by phone	Second medical opinion access	Time Waiting	Time spent with MD	Time Waiting
15	Time Waiting	Time Waiting	Hours of operation	Hotel services & extras	Hours of operation
16	Time spent with MD	Hours of operation	Hotel services & extras	Time Waiting	Hotel services & extras
17	Medical records keeping	Hotel services & extras	Time spent with MD	Time spent on Admin matters	Time spent with MD
18	Hours of operation	Time spent with MD	Appointment taking by phone	Medical records keeping	Appointment taking by phone
19	Hotel services & extras	Appointment taking by phone	Medical records keeping	Appointment taking by phone	Medical records keeping
20	Second medical opinion access	Medical records keeping	Second medical opinion access	Orderliness in system	Second medical opinion access
21	Time spent on Admin matters	Gender of medical provider choice	Gender of medical provider choice	Information on General Health Issues	Gender of medical provider choice

Staff ranks the “information given about the case”(grey) more highly than doctors. This may indeed point the nature of the relationship between staff and patients: where patients may have a tendency to ask questions “later” (post consultation) of staff about their own illness/treatment/prescription.

Table 5-8: Comparing attributes from staff point of view

	Users (Household)	Users (Focus Group)	Staff	MDs	Direct/Admin
1	Cleanliness	MD Competence	MD Competence	Treatment by MD	MD Competence
2	MD Competence	Equipment (Sophisticated) availability	Treatment by MD	MD Competence	Fees (Cost of service)
3	Equipment (Sophisticated) availability	Treatment by MD	Equipment (Sophisticated) availability	Fees (Cost of service)	Equipment (Sophisticated) availability
4	Treatment by MD	Privacy & Confidentiality	Cleanliness	Equipment (Sophisticated) availability	Treatment by the staff
5	MD adherence to appointments	Information given about case	Treatment by the staff	Cleanliness	Treatment by MD
6	Treatment by the staff	Cleanliness	Information given about case	Treatment by the staff	MD adherence to appointments
7	Fees (Cost of service)	Fees (Cost of service)	Fees (Cost of service)	Hours of operation	Privacy & Confidentiality
8	Orderliness in system	Information on General Health Issues	Privacy & Confidentiality	Level of comfort	Information given about case
9	Information given about case	Treatment by the staff	Time spent on Admin matters	Gender of medical provider choice	Orderliness in system
10	Privacy & Confidentiality	Orderliness in system	MD adherence to appointments	Second medical opinion access	Cleanliness
11	Level of comfort	MD adherence to appointments	Information on General Health Issues	Privacy & Confidentiality	Information on General Health Issues
12	Gender of medical provider choice	Level of comfort	Orderliness in system	Information given about case	Time spent on Admin matters
13	Information on General Health Issues	Time spent on Admin matters	Level of comfort	MD adherence to appointments	Level of comfort
14	Appointment taking by phone	Second medical opinion access	Time Waiting	Time spent with MD	Time Waiting
15	Time Waiting	Time Waiting	Hours of operation	Hotel services & extras	Hours of operation
16	Time spent with MD	Hours of operation	Hotel services & extras	Time Waiting	Hotel services & extras
17	Medical records keeping	Hotel services & extras	Time spent with MD	Time spent on Admin matters	Time spent with MD
18	Hours of operation	Time spent with MD	Appointment taking by phone	Medical records keeping	Appointment taking by phone
19	Hotel services & extras	Appointment taking by phone	Medical records keeping	Appointment taking by phone	Medical records keeping
20	Second medical opinion access	Medical records keeping	Second medical opinion access	Orderliness in system	Second medical opinion access
21	Time spent on Admin matters	Gender of medical provider choice	Gender of medical provider choice	Information on General Health Issues	Gender of medical provider choice

Again, we observe here the “cost of service” (red) being ranked highly. It is also noticeable that “hours of operation” (grey) was highly ranked by doctors, but not so highly ranked by all other groups. This may reflect the doctor’s own reality of work overload and time constraints rather than user needs or expectations.

Table 5-9: Comparing attributes from doctors’ point of view

	Users (Household)	Users (Focus Group)	Staff	MDs	Direct/Admin
1	Cleanliness	MD Competence	MD Competence	Treatment by MD	MD Competence
2	MD Competence	Equipment (Sophisticated) availability	Treatment by MD	MD Competence	Fees (Cost of service)
3	Equipment (Sophisticated) availability	Treatment by MD	Equipment (Sophisticated) availability	Fees (Cost of service)	Equipment (Sophisticated) availability
4	Treatment by MD	Privacy & Confidentiality	Cleanliness	Equipment (Sophisticated) availability	Treatment by the staff
5	MD adherence to appointments	Information given about case	Treatment by the staff	Cleanliness	Treatment by MD
6	Treatment by the staff	Cleanliness	Information given about case	Treatment by the staff	MD adherence to appointments
7	Fees (Cost of service)	Fees (Cost of service)	Fees (Cost of service)	Hours of operation	Privacy & Confidentiality
8	Orderliness in system	Information on General Health Issues	Privacy & Confidentiality	Level of comfort	Information given about case
9	Information given about case	Treatment by the staff	Time spent on Admin matters	Gender of medical provider choice	Orderliness in system
10	Privacy & Confidentiality	Orderliness in system	MD adherence to appointments	Second medical opinion access	Cleanliness
11	Level of comfort	MD adherence to appointments	Information on General Health Issues	Privacy & Confidentiality	Information on General Health Issues
12	Gender of medical provider choice	Level of comfort	Orderliness in system	Information given about case	Time spent on Admin matters
13	Information on General Health Issues	Time spent on Admin matters	Level of comfort	MD adherence to appointments	Level of comfort
14	Appointment taking by phone	Second medical opinion access	Time Waiting	Time spent with MD	Time Waiting
15	Time Waiting	Time Waiting	Hours of operation	Hotel services & extras	Hours of operation
16	Time spent with MD	Hours of operation	Hotel services & extras	Time Waiting	Hotel services & extras
17	Medical records keeping	Hotel services & extras	Time spent with MD	Time spent on Admin matters	Time spent with MD
18	Hours of operation	Time spent with MD	Appointment taking by phone	Medical records keeping	Appointment taking by phone
19	Hotel services & extras	Appointment taking by phone	Medical records keeping	Appointment taking by phone	Medical records keeping
20	Second medical opinion access	Medical records keeping	Second medical opinion access	Orderliness in system	Second medical opinion access
21	Time spent on Admin matters	Gender of medical provider choice	Gender of medical provider choice	Information on General Health Issues	Gender of medical provider choice

Staff Ranking

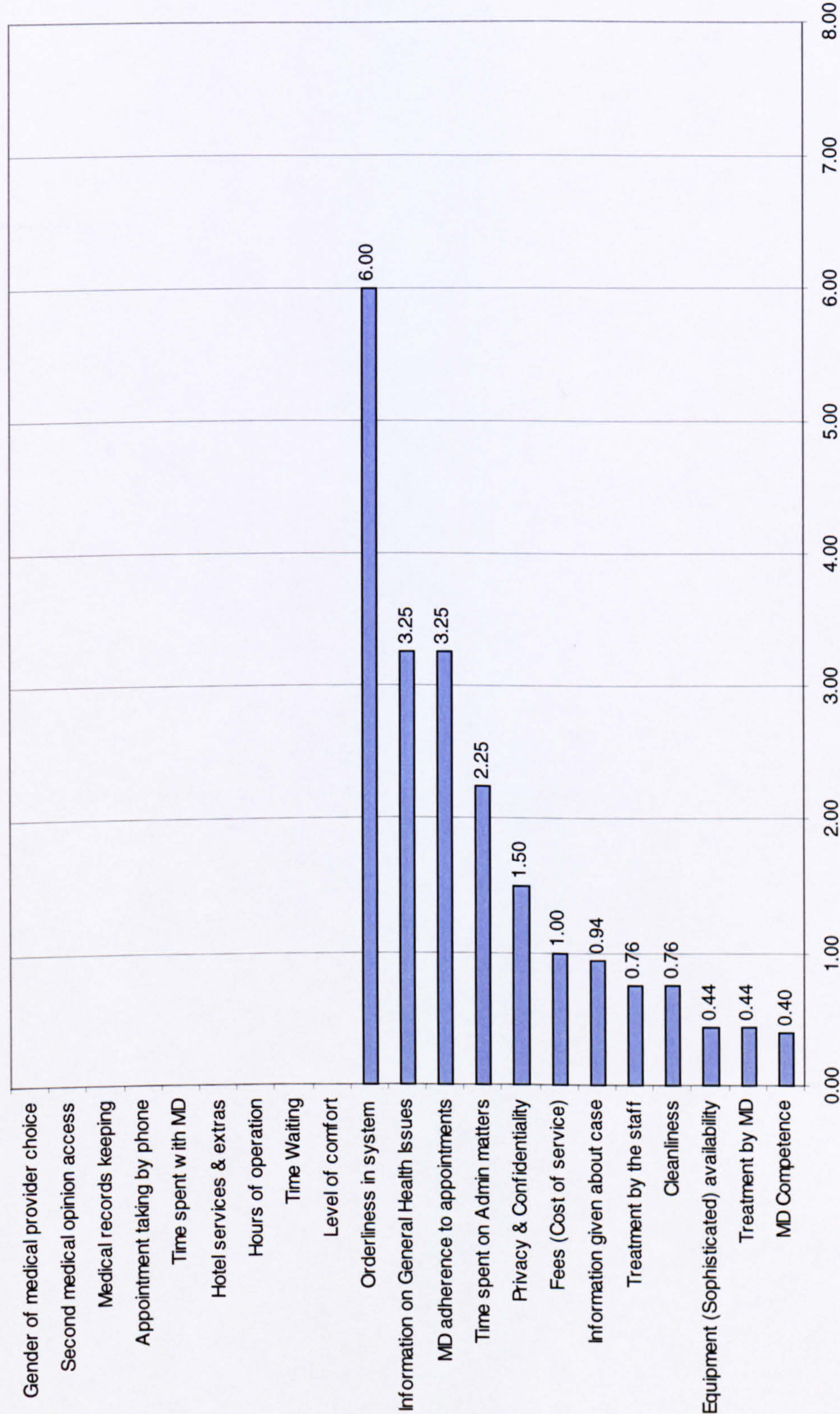


Table 5-10: Staff ranking of attributes bar graph

User Ranking

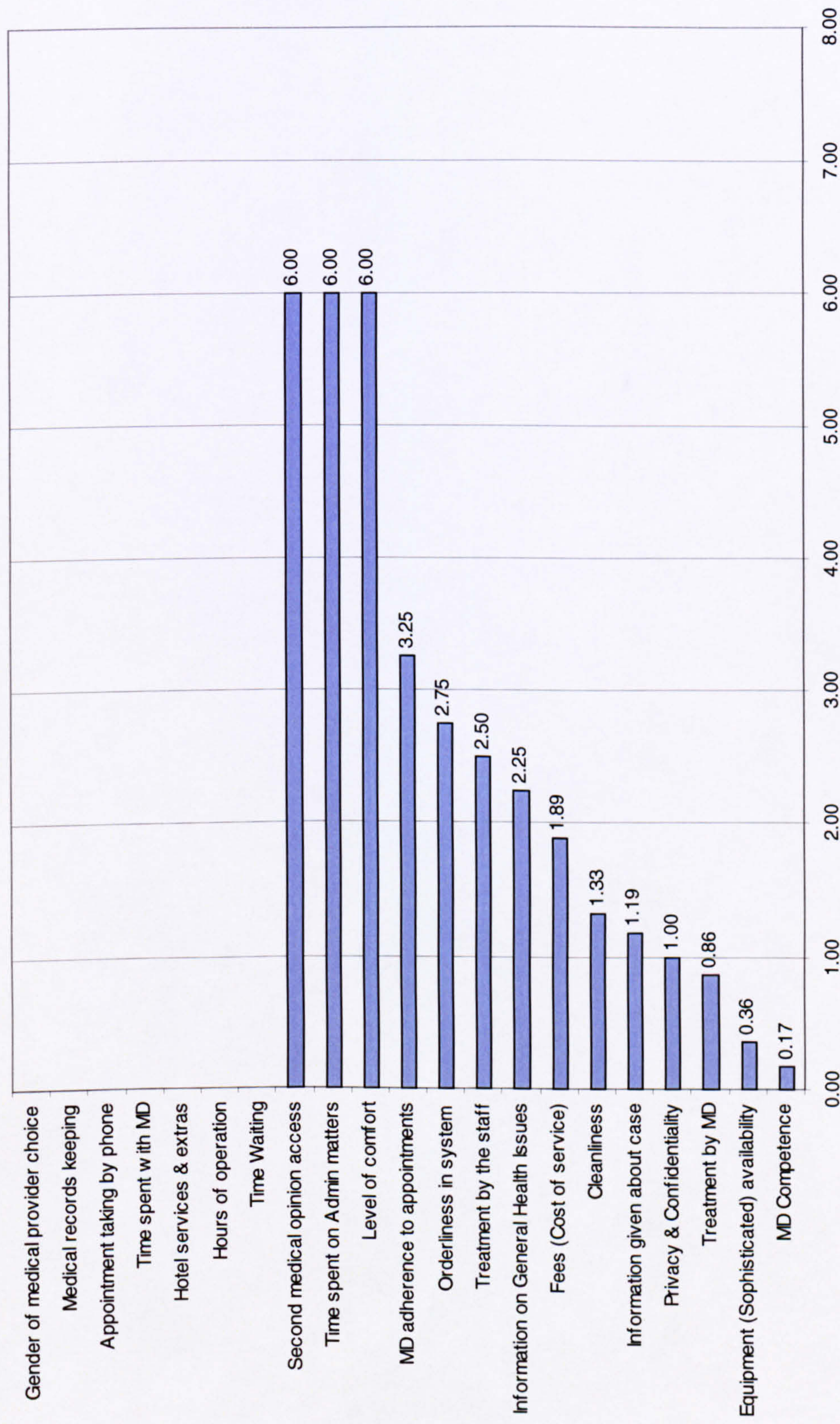


Figure 5-21: User/Patient ranking of attributesbargraph - focus group

Admin/Directors Ranking

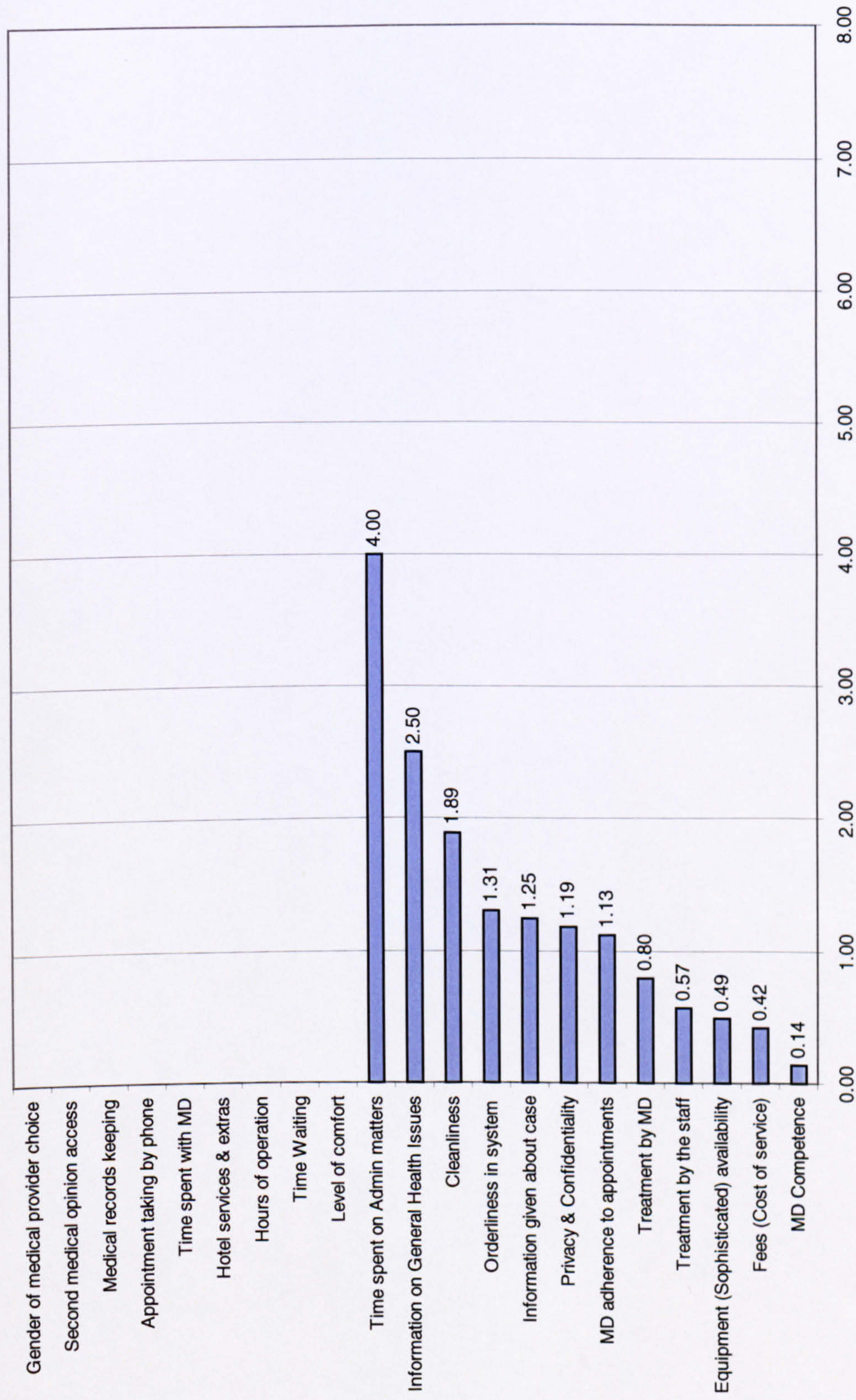


Figure 5-22: Admin directors ranking of attributes bar graph

MDs Ranking

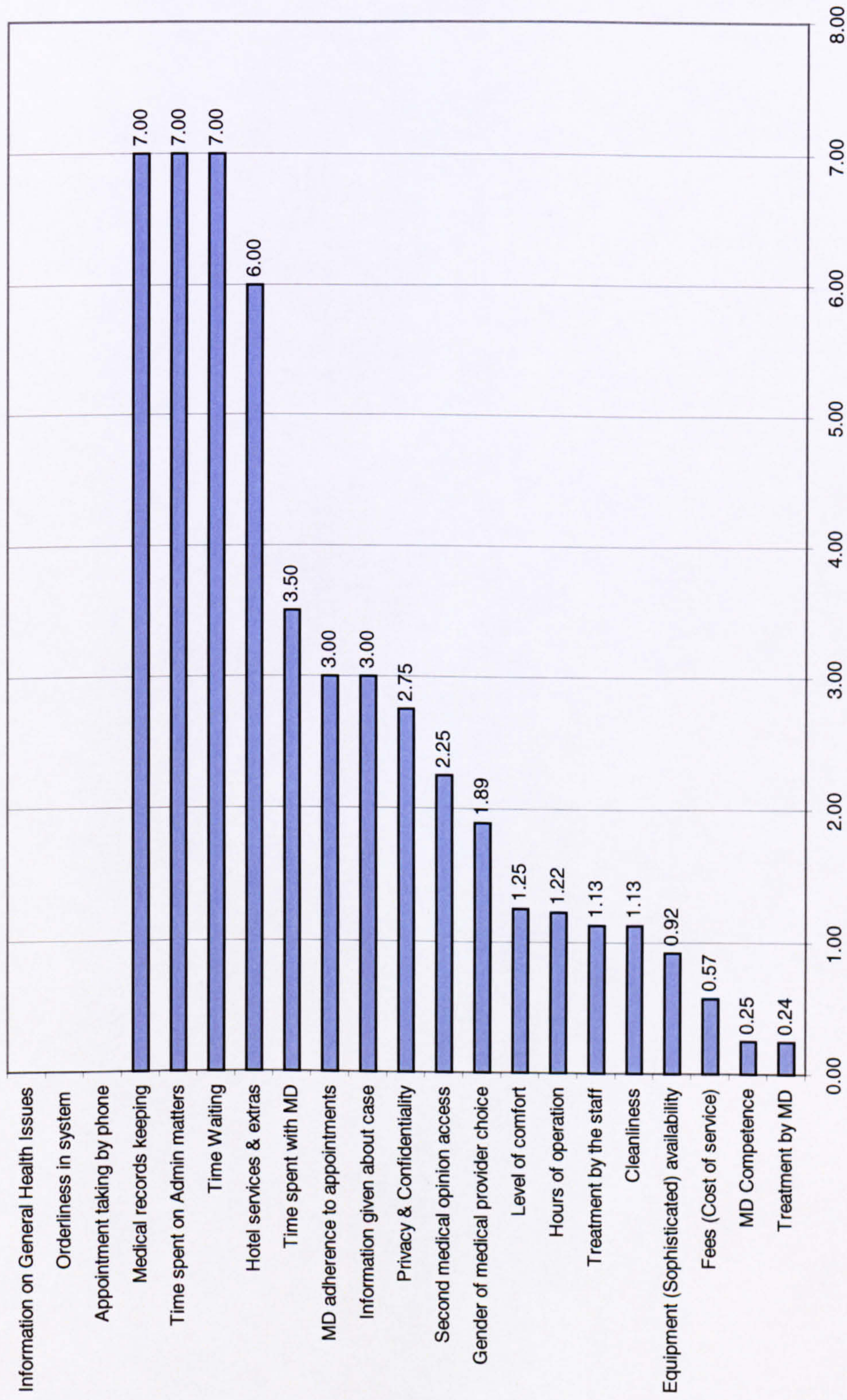


Figure 5-23: Doctors ranking of attributes bar graph

5.5 Grouping patient satisfaction attributes

Attributes can be sorted into categories indicative of specific aspects related to healthcare facilities. Indeed they maybe seen as proxies used by users to assess key indicators.

When households in the West Bank were asked to rank attributes of satisfaction in a prospective sense, the data points to the importance of

1. Cleanliness
2. MD Competence
3. Equipment (Sophisticated) availability
4. Treatment by MD
5. MD adherence to appointments
6. Treatment by the staff
7. Fees (Cost of service)

These attributes reflect the needs and preferences of households as dictated by a prevailing value system: a value system that seems to stress human, physical, and social dimensions. Maslow's (1954) hierarchy of needs predicts these human needs to be dynamic and evolving. Thus, these results would be expected to change over time, with experience and knowledge.

Studies have divided (Gustafson, 1993) user needs and preferences in healthcare settings into:

- ☐ Must have – take it for granted
- ☐ Current norms - typical wants
- ☐ Nice to have – attractive needs

Most users lack the technical knowledge to assess the quality of care. Most tend to use proxy indicators ranging from treatment outcome, pain levels, length of consultations, humanness of staff, etc. These proxy measures tend to vary with the type of care, location of care, and severity of illness and disease. They also vary between individuals and cultures.

It therefore may be more appropriate to create a model that incorporates patient, staff and doctors value systems into managerial decision-making. Determining the key

dimensions of a value system can also be a difficult process since many of these factors are intangibles.

Many different types of categories have been proposed to sort through attributes.

Table 5.11 below presents some of those found in the literature.

It is evident from the findings of the household survey that patients tended to focus on different categories

1. Quality of clinical care: MD competence, equipment and technology
2. Physical/Environment aspects: cleanliness
3. Humanness: treatment by staff and MDs
4. Fees & cost of services

However, the exist questionnaire findings (those in response to the open ended question) focus tended to stress more systems/operational matters dealing with time, as well as clinical quality aspects.

The focus group results tended to address in-depth perceptions of quality, physical environment, and psychological and humanness factors dealing with privacy and the need for information.

Table 5-11: Categories of satisfaction attributes

<ul style="list-style-type: none"> • Quality of medical care • Time • Environment • Psychological state • Amenities and Extras • Human Interaction • Fee 	<ul style="list-style-type: none"> • Quality of medical care • Physical Environment • Social/Psychological Environment • Systems/Procedures 	<ul style="list-style-type: none"> • Medical Expertise • Environment Surroundings • Staff Courtesy • Responsiveness • Office Systems / Procedures • Extras • Affordability 	<u>Baker et al (1991)</u> <u>grouped principle components for analysis as</u> <ul style="list-style-type: none"> • Continuity • Accessibility • Availability • Medical care • Premises 	<u>Satisfaction Dimensions (Hardy & West, 1994)</u> <ul style="list-style-type: none"> • Patient perceptions of Quality of care • Satisfaction with own health • Level of well being (sense of control, and feelings of anxiety) 	<u>Satisfaction Dimensions (Health policy advisory unit 1989)</u> <ul style="list-style-type: none"> • Medical care and information • Physical facilities • Non-tangible environment • Quality of food • Nursing care • Visiting arrangements 	<u>Satisfaction Dimensions (Hall & Dornan, 1988) – in order of importance</u> <ol style="list-style-type: none"> 1. Overall quality 2. Humanness 3. Technical competence 4. Outcome 5. Facilities 6. Continuity of care 7. Access 8. Informativeness 9. Cost 10. Bureaucracy 11. Attention to psychological problems
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Mark Avis{ XE "Avis, Mark" } (1994) review and summary of others' work in clustering attributes

The tables below (5.12 & 5.13) sort the household survey results using broader categories of quality, physical environment, humanness, convenience, and fee (cost) for service. This categorisation shows that users ranked the importance as follows: quality (most important), physical environment, humanness, convenience, and fee (see figure 5.24 next page). Quality received a much higher ranking than the other categories on this scale. But this has to be interpreted with caution, as some attributes may indeed be viewed as contributors to more than one broader category, and may be collapsed under different categories. Moreover, the attribute hierarchy from this particular household study, by definition, is reflective of a specific population, culture, and time.

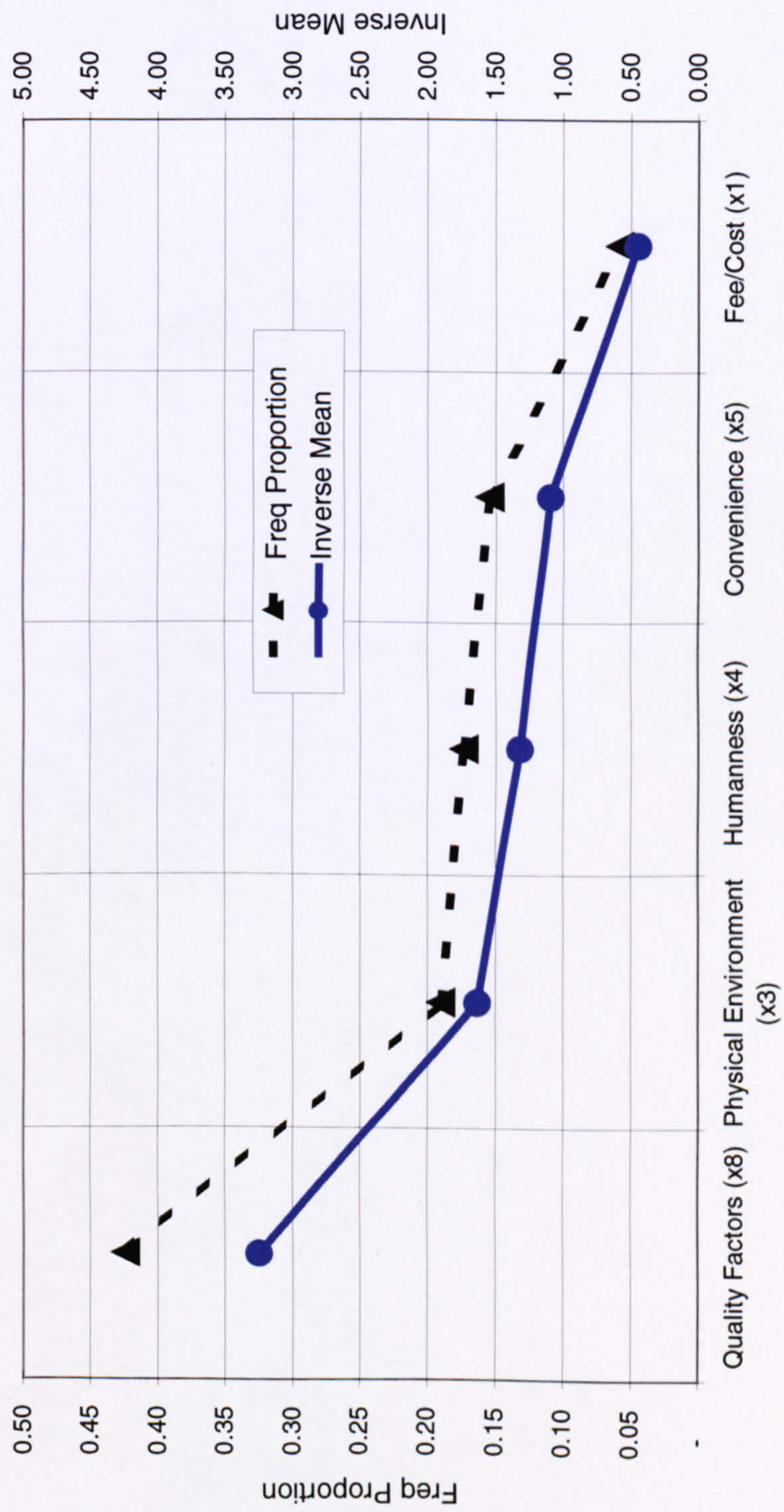
Table 5-12: Household survey attribute dimensions

	Attribute Dimensions	Freq	Freq Prop	Sum Means/ # Attributes	Mean/Freq	x 1000 to modify scale for graph	Inverse Mean
Q	Quality Factors (x8)	1,412	0.42	4.35	0.003079	0.308	3.25
P	Physical Environment (x3)	632	0.19	3.87	0.006118	0.612	1.63
H	Humanness (x4)	578	0.17	4.38	0.007571	0.757	1.32
C	Convenience (x5)	514	0.15	4.68	0.009105	0.911	1.10
F	Fee/Cost (x1)	192	0.06	4.31	0.022461	2.246	0.45

Table 5-13: Household survey attributes grouped into five dimensions

Attribute	Attribute Dimensions	
MD adherence to appointments	Convenience (x5 attributes)	C
Appointment taking by phone		C
Time Waiting		C
Hours of operation		C
Time spent on Admin matters		C
Fees (Cost of service)	Fee/Cost (x1)	F
Treatment by the staff	Humanness (x4 attributes)	H
Privacy & Confidentiality		H
Level of comfort		H
Gender of medical provider choice		H
Cleanliness	Physical Environment (x3 attributes)	P
Orderliness in system		P
Hotel services & extras		P
MD Competence	Quality Associated Factors (x8 attributes)	Q
Equipment (Sophisticated) availability		Q
Treatment by MD		Q
Information given about case		Q
Information on General Health Issues		Q
Time spent with MD		Q
Medical records keeping		Q
Second medical opinion access		Q

Figure 5-24: Household survey dimensions freq. proportions & mean line graph



5.6 Association of attributes between groups

An examination of the association between attributes of patient satisfaction and attributes of job satisfaction for staff and doctors may lead to a better understanding of decision outcomes on each group as well as insight in how to optimise decision making.

Table 5.14 below highlights key contributors to satisfaction of the three groups.

Table 5-14: Comparing attributes of satisfaction amongst the three groups

A) Patients	B) Doctors	C) Staff
<div>1. Appointment making by phone</div> <div>2. Cleanliness</div> <div>3. Equipment (Sophisticated) availability</div> <div>4. Fees (Cost of service)</div> <div>5. Gender of medical provider choice</div> <div>6. Hotel services & extras</div> <div>7. Hours of operation</div> <div>8. Information given about case</div> <div>9. Information on General Health Issues</div> <div>10. Level of comfort</div> <div>11. MD adherence to appointments</div> <div>12. MD Competence</div> <div>13. Medical records keeping</div> <div>14. Orderliness in system</div> <div>15. Privacy & confidentiality</div> <div>16. Second medical opinion access</div> <div>17. Time spent on Admin matters</div> <div>18. Time spent with MD</div> <div>19. Time Waiting</div> <div>20. Treatment by MD</div> <div>21. Treatment by the staff</div>	<div>1. Accurate diagnostics</div> <div>2. Autonomy</div> <div>3. Competence of support staff</div> <div>4. Competition</div> <div>5. Continuous education</div> <div>6. Early diagnosis and treatment</div> <div>7. Patients ability to pay</div> <div>8. Pay & financial benefits</div> <div>9. Privacy</div> <div>10. Shorter results turn-around times</div> <div>11. Technology</div> <div>12. Third party insurance</div>	<div>1. Continuous education</div> <div>2. Development opportunities</div> <div>3. Empathetic management</div> <div>4. Pay & financial benefits</div> <div>5. Recognition</div> <div>6. Self esteem</div> <div>7. Working conditions</div> <div>8. Working hours</div> <div>9. Workloads</div>

However, further analysis reveals (table 5.15 below) that staff and doctor behaviour, at least in the category of “treatment” (non-clinical) of users clearly and strongly

influences user satisfaction. Although it is difficult to express “treatment” in absolute terms and with one definition, it is nevertheless evident that users find this dimension important. Moreover, this dimension contributes to a broader category of satisfaction dealing with “humanness” of treatment, and/or “quality”. Management decision lines of influence on clients can be both direct and indirect. For example, the “treatment by staff” attribute is a function of several aspects relating to user perception, as well as staff personality traits, feelings, morale, etc. Thus the various aspects contributing to staff morale (and satisfaction) will necessarily impact on patient satisfaction. Additionally, management decisions that impact directly on one or several user satisfaction attributes, may in turn loop back to impact on staff.

Table 5-15: Satisfaction attributes: lines of influence

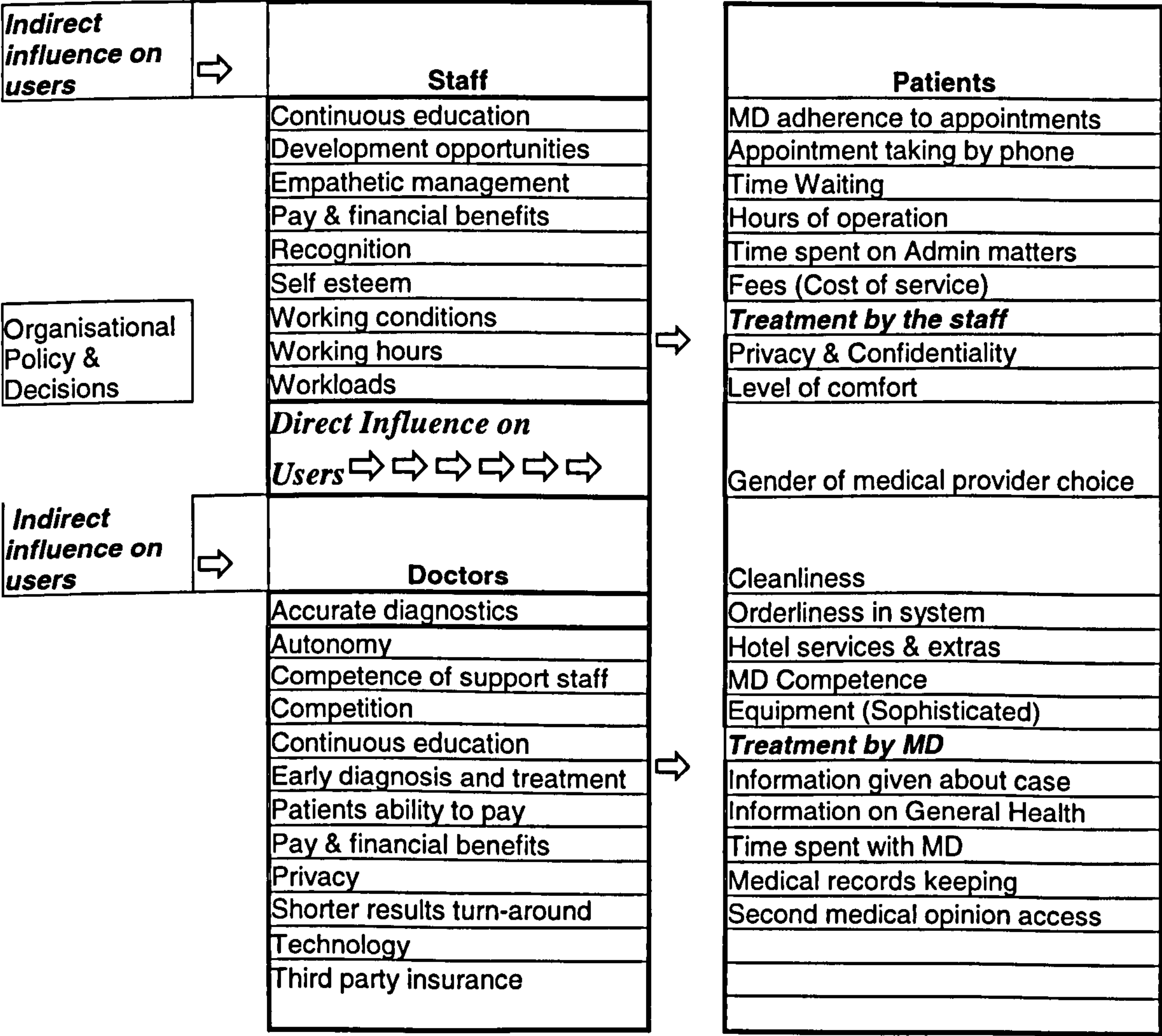


Table 5-16: The association of attributes of satisfaction

	Item	Patient A	Staff B	Doctors C
		<i>Satisfaction Levels</i>		
1	Ability to access second medical opinion	+	-	-
2	Ability to choose gender of MD	+	/	-
3	Appointment taking by phone	+	/	+/-
4	Cleanliness	+	+	+
5	Equipment (Sophisticated) availability	+	+	+
6	Fees (cost of service)	+	+	+
7	Hotel Services & extras	+	-	-
8	Hours of operation	+	+	+
9	Information given about case	+	/	/
10	Information on General Health	+	/	/
11	Level of comfort	+	/	/
12	MD adherence to appointments	+	/	-
13	MD Competence	+	+	+
14	Medical Records Keeping	+	/	/
15	Orderliness in system	+	/	+
16	Privacy & Confidentiality	+	/	/
17	Time spent on Admin matters	+	/	/
18	Time spent with MD	+	/	/
19	Time Waiting Time	+	/	/
20	Treatment by staff	+	+	/
21	Treatment by the MD (non-clinical)	+	-	+

Legend:

In most cases:

- + Increases satisfaction level
- Decreases satisfaction level
- / Does not affect satisfaction level

Table 5.16 above illustrates how decisions that impact on attributes in column ‘A’ above, may result in simultaneous changes in attributes in columns ‘B’ and ‘C’. For example changes in rows 1 and 2 favouring user choice may be perceived negatively by doctors. The existence and extent of these associations would have to be determined for different settings, healthcare systems, and cultures.

6 Commentary of the proposed policy, decision, satisfaction model

The results in the preceding analysis section corroborate findings by other researchers (Avis, 1995; Williams, 1994a; Linder-Pelz, 1982a&b.) as to the complexity and true meaning of the concept of satisfaction. It is not immediately clear, from a practical management perspective, what users and health professionals are expressing.

Intangible concepts like comfort, autonomy, competence, merit, humanness, are subjective in nature. Although the examination of constituent attributes of satisfaction sheds more light as to the predictors of the phenomenon, the associations are not direct and many extraneous variables are at play. Furthermore, if the satisfaction data were taken at face value, would this contribute in any meaningful way to management objectives and desired outcomes? For example, would a centre that is super clean, with competent friendly doctors, but more expensive than a comparable one that is not so clean attract more users and yield better satisfaction? A simple “yes” or “no” answer is not easy to arrive at.

While it is possible to devise instruments that yield statistical aggregates and weighting to various known attributes of patient satisfaction and employee job satisfaction, it is more challenging to incorporate such data in a meaningful manner into decision-making and policy development.

Individuals vary as to how they arrive at final decisions and so does decision theory in explaining and understating these processes. People behaviour often deviates from the best models that approximate reality (Plous 1995; Tversky & Kahneman 1981).

Patient satisfaction, staff job satisfaction, physician job satisfaction, quality of care systems, and policy development are all key aspects to the success of any organisation. They are often however dealt with as separate entities or separate programmes. Complexity is compounded when these various programmes are directed and lead by different groups and individuals. The linkages between these

critical dimensions are not clearly articulated and understood as to how they contribute to efficient delivery of care.

A unified model is needed to relate all key aspects: a model that may lead to a higher degree of concord between organisational goals, desired objective, decision outcomes, and overall satisfaction.

Is satisfaction a dependent variable influenced by patient and service characteristics? Or is it an independent variable predictive of subsequent behaviour? (Linder-Pelz, 1982a&b).

When managers focus on the former, factors that influence decision-making tend to be more concrete dimensions and measurements of the services and clinical quality (a positivist philosophy). However, a focus on the latter, may lead one to examine patient decisions (observed behaviour) and attempt to account for those in decision process (a phenomenological approach). When both parts of the question above are simultaneously addressed a new model emerges in which management may be able to view a more holistic and unified picture. Additionally, when aspects of staff and doctor satisfaction are factored into the model, a more realistic and multi-dimensional view may arise.

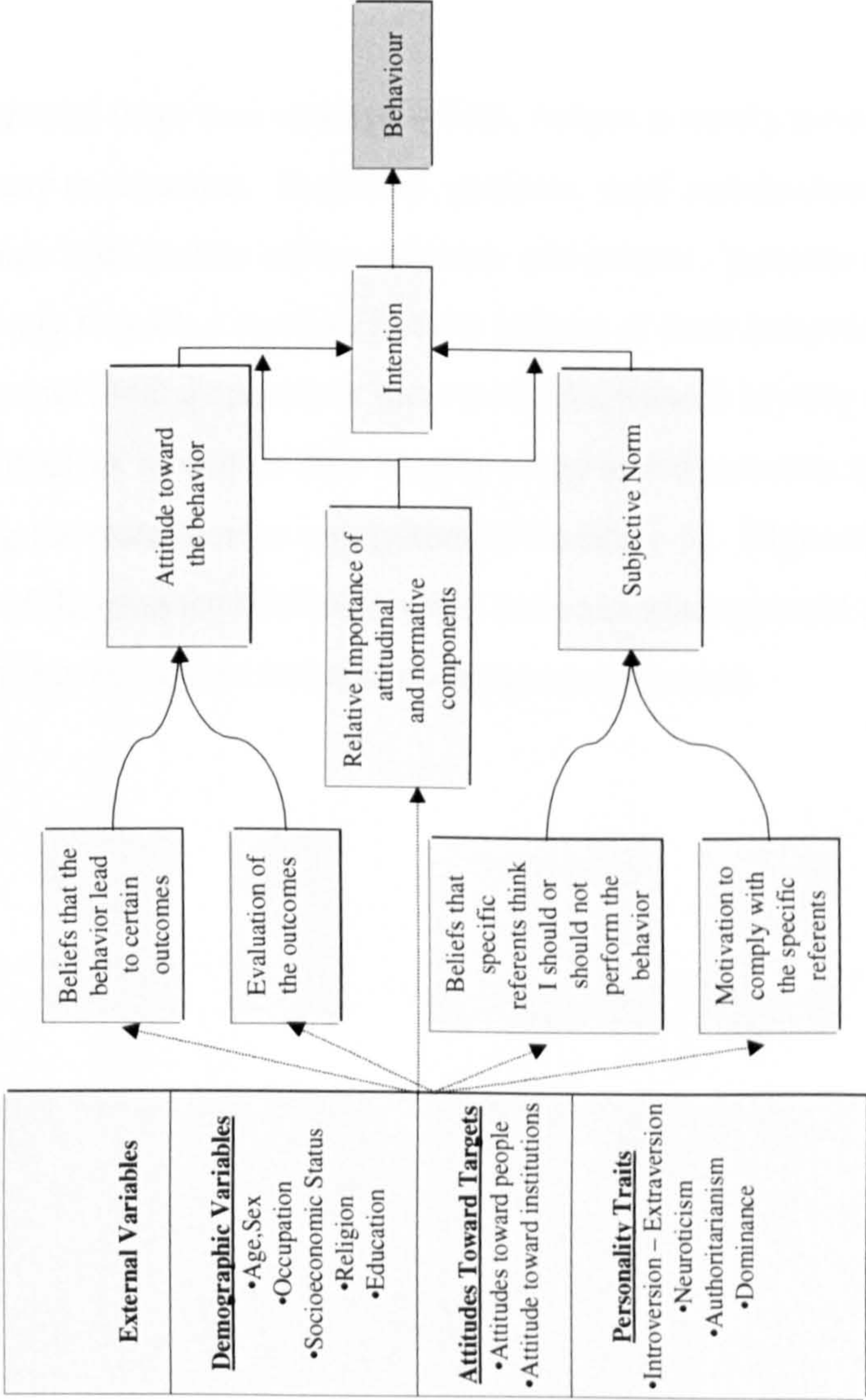
6.1 *Current decision-making models*

Much of the literature on patient satisfaction and healthcare organisation personnel job satisfaction has not made attempts to examine the possible association of these two fundamental variables to one another, and to senior healthcare management functions of decision making and policy development.

The relative influence of normative and behavioural beliefs on observed human behaviour is affected by many factors. This relative influence or strength will sway intentions and observed behaviour in one direction or another (Ajzen & Fishbein, 1980). The figure (6.1) below illustrates the impact of various external variables on normative and behavioural beliefs.

Figure 6-1: Direct & Indirect Variables in Behaviour

Direct & Indirect Variables in Behaviour



Source: Ajzen & Fishbein,
Understanding Attitudes & Predicting Social Behavior, Page 84

During the searching for an alternative or choice mode, values, beliefs, attitudes and information may be components. During the decision mode behaviour is observed. Decision output is different from desired outcome in this context. Output is viewed as the tangible (and usually immediate) modification the decision brings about (i.e.. Switch from manual log of patients to a computerised system), whereas outcome is the desired objective (i.e. improved efficiency in appointment management for patients).

This distinction is crucial from two vantage points, output is easily measurable, and outcome is not so easy to measure. Secondly, patients, staff and doctors to varying degrees may influence both and/or either outcome and output: patients may react positively or negatively to such a system, but the impact of their behaviour would be observed at the outcome level as possibly increased (decreased) loyalty and business. However, staff and doctors would be able to play a key and direct role at the output level (i.e. by making the transition to computers or resisting it). Figure 6.2 below highlights the state of dissonance that may result between management and its clients when negative reactions by clients undermine decision outcomes.

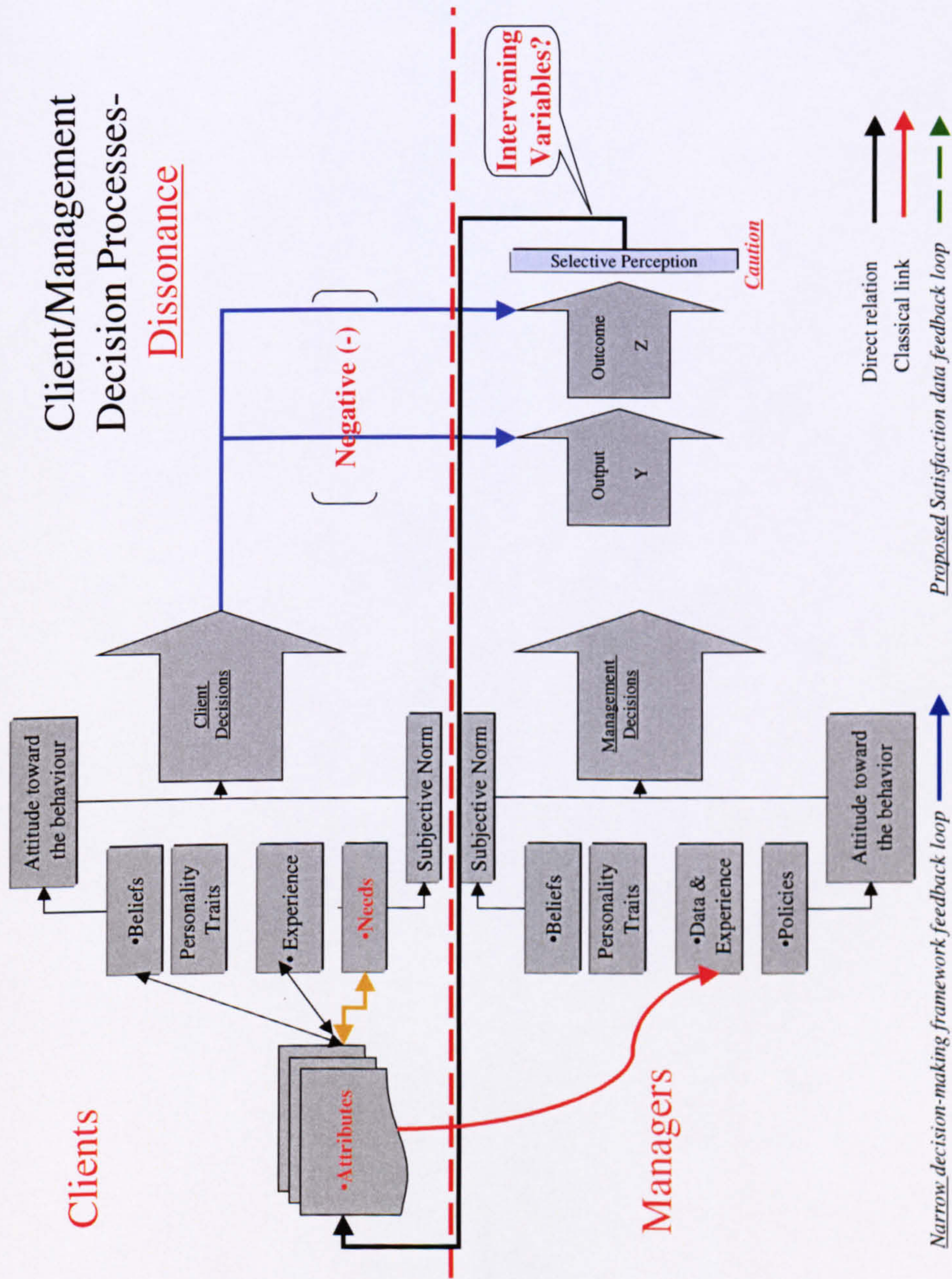


Figure 6-2: Client-Management Organisational Dissonance

The model below (figure 6.3) illustrates decision processes that do *not* factor in or account for satisfaction data. Decision output and outcome may be negatively impacted (blue feedback loops) by the behaviour (decisions) of any or all of the client groups. However, in such a model, management is faced with a situation in which they simply react continuously in order to fine tune decisions: a trial and error strategy that does not incorporate an appreciation for the role patients, staff and doctors play in influencing systems and care within the organisation. Thus in the typical (narrow) framework for decision-making, decisions are made and evaluated from the perspective to the extent of achievement of desired objective. This may function well if decisions appear to bring about desired target goals. However, when behaviour and decisions made by any or all of the client groups involved begin to influence (counter to objectives) the desired outcome (blue solid line), a high risk exists for failure. Continuing to narrowly focus on the decision outcome –client behaviour loop would precipitate into a trial and error exercise in management.

Decision Making without Satisfaction Measurement

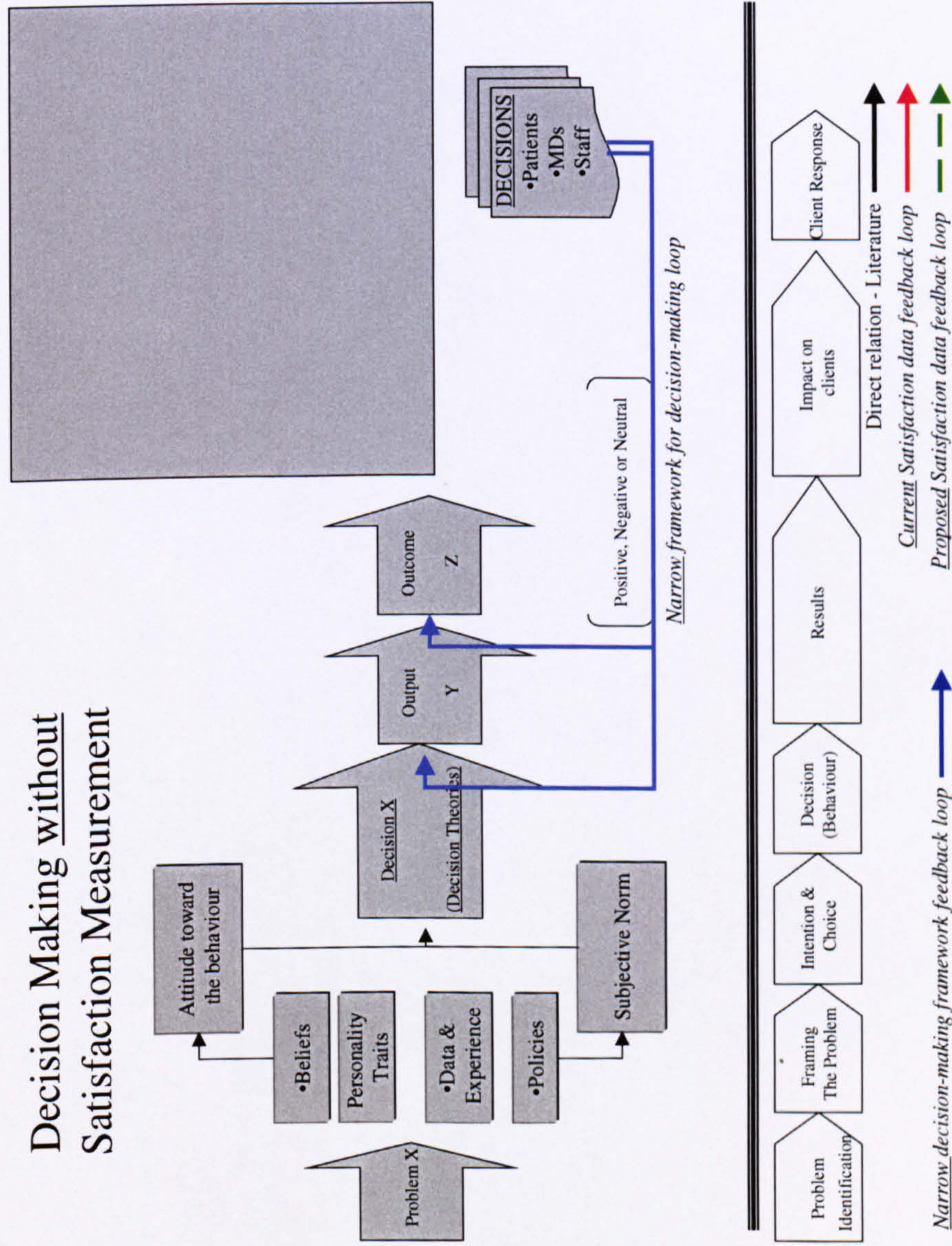
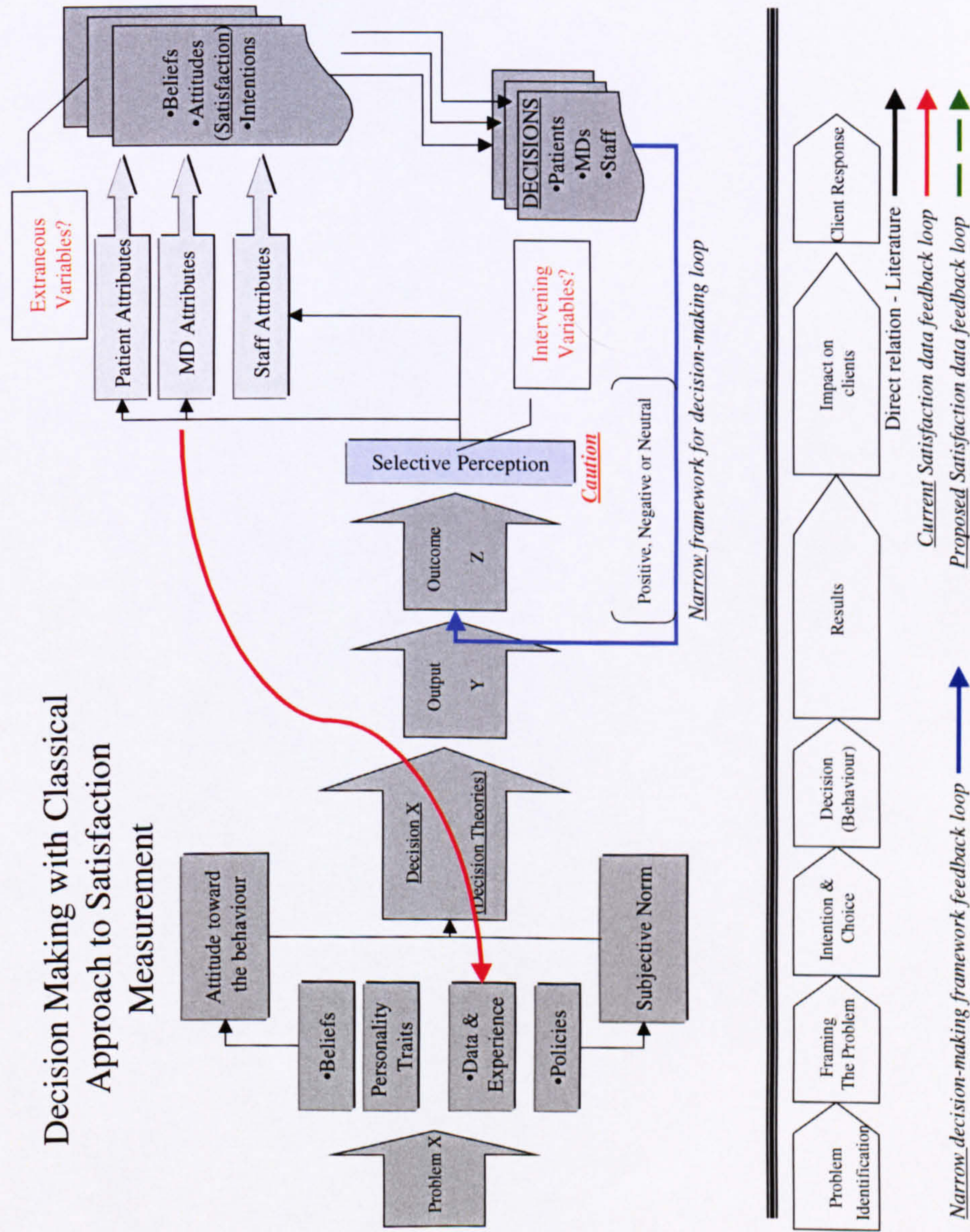


Figure 6-3: Decision-making without satisfaction measurement

When satisfaction data are incorporated in the classical model solely as reports and statistics, the model changes as below (figure 6.4) (red line). Framing policy and decision contexts to include the concept of satisfaction (red solid line) may result in decisions more congruent with client needs and expectations and thus less negative feedback (blue solid line). This scenario lowers the risk of failure, but still does not adequately address the other variables affecting decisions: policy, beliefs, and personality traits.

Figure 6-4: Decision-making with classical approach to satisfaction measurement



6.2 Conceptual frame work to guide decision-making

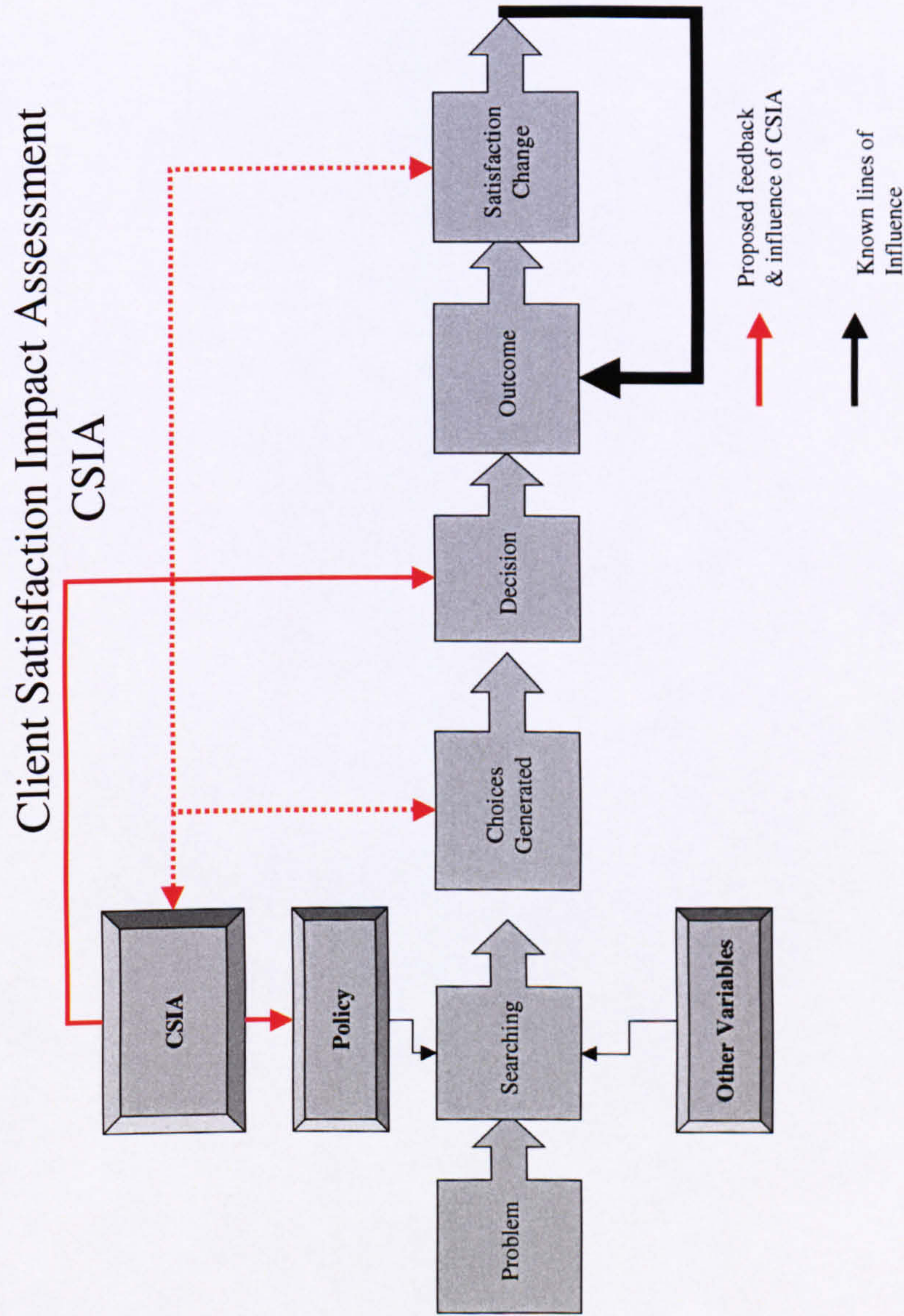
A better model utilising the continuous stream of satisfaction findings and data may be installed to inform decision makers and decision processes on client needs. This would lower the risk of decision objectives being separated from client needs and expectations. To further strengthen the value added from such findings, they need to feed into policy development. This would act synergistically with other information to guide a healthcare provider towards more harmony within (with its staff and doctors) and toward recipients of care (users/patients).

6.3 Client satisfaction impact assessment (CSIA)

The model below (figure 6.5) unifies three critical components of management: policy development, decision-making, and satisfaction monitoring. It works to re-frame decision and policy making in what may be termed “Client Impact Assessment” or “Client Satisfaction Impact Assessment” (CSIA). Such a process would be a prerequisite for policy development and major decisions. This assessment step would be informed by the data from satisfaction findings, and would in turn act to predict the influence on satisfaction attributes (expressive of people needs).

The flow diagram below (figure 6.6) illustrates the role CSIA can play by influencing policy and decisions, as well as the satisfaction data and studies.

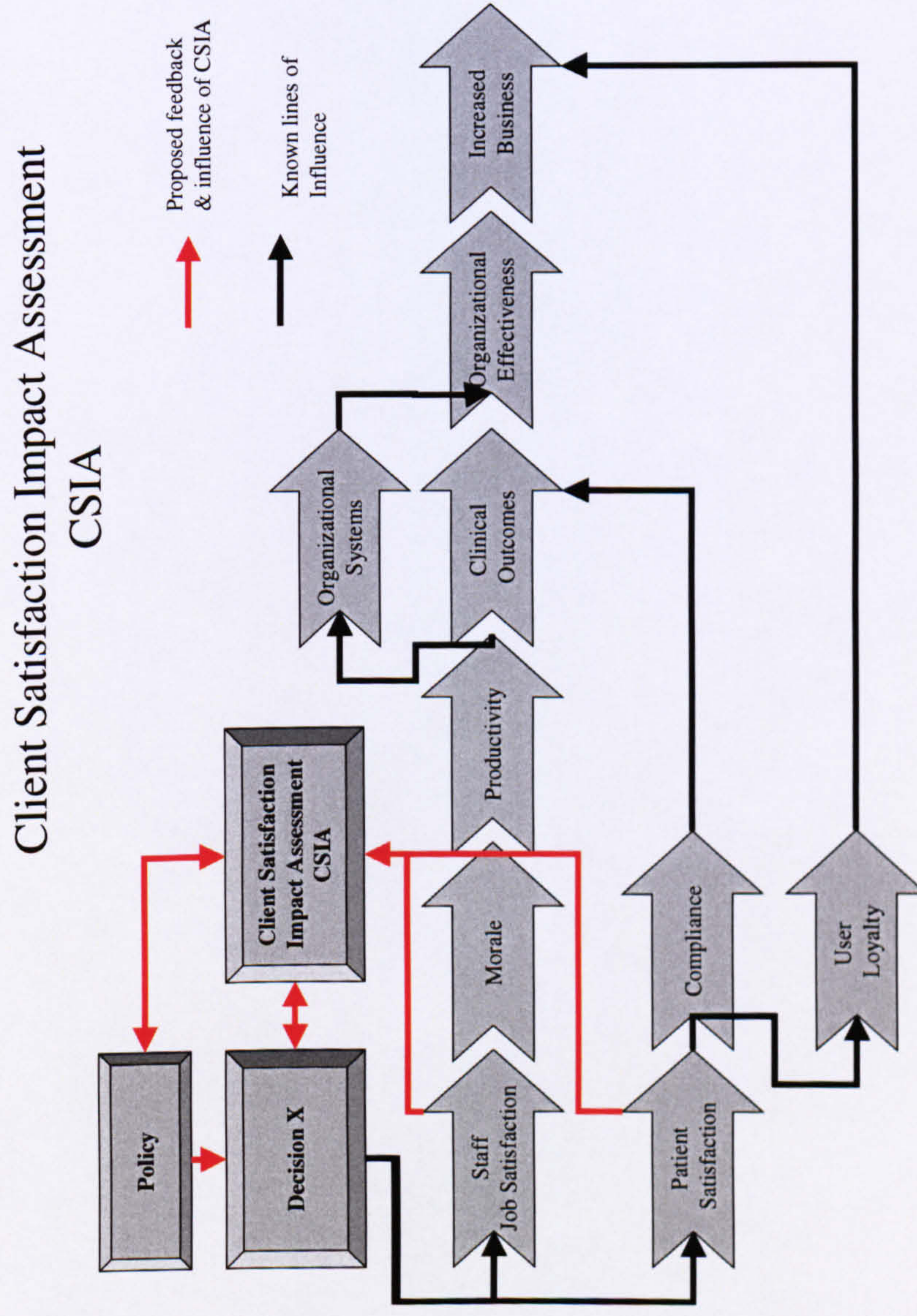
Figure 6-6: Client Satisfaction Impact Assessment (CSIA) - Generic Model



Appropriate applications of CSIA methods may lead to positive feedback from clients towards desired management targets. By working towards policy in line with client expectations, helping to generate decision alternatives more in tune with client needs, and continuously being responsive to client reactions, CSIA would serve as a vital management tool.

The illustration below (figure 6.7) further elaborates CSIA into healthcare settings. As discussed earlier in the analysis section (table 5-14), decision impact is more complex due the influences of intervening variables coupled with the multi-disciplinary and team approach required in healthcare.

Figure 6-7: Client Satisfaction Impact Assessment (CSIA) in healthcare



Decision outcomes can be more accurate predictors of higher satisfaction only when appropriate policy has taken into account client value systems and beliefs (green dotted lines). Those value systems and beliefs are partly expressed as (measurable) attributes of satisfaction. And satisfaction is only inferred through observed behaviour. Policy becomes a dependent variable influenced by client decisions and attributes of satisfaction. Thus a synergy may result from use of information (red line) and application of sound policy (green line). Formalising such a process through “Client Satisfaction Impact Assessment” methods, may work to institutionalise such “thinking” into healthcare management systems. The tools employed under the umbrella of CSIA can vary depending the type of facility. They may typically include the types of instruments used in this dissertation, as well as others: interviews, telephone interviews, observations, etc.

The Model also points to critical factor of “selective perception” or the social construct as viewed by client of management. Managerial decisions communicate meaning to both, groups directly targeted and others not directly targeted. What is “interpreted” as reality by these groups is what influences attributes of satisfaction and the resulting (if any) change in behaviour: an added dimension of appropriate communication is introduced (see section on communications below) If not addressed correctly, this process of selective perception will influence satisfaction in unforeseen (negative) directions.

In this model, it is not sufficient to view satisfaction measurement as data or statistic to be incorporated into single or multiple decisions. Expressions of satisfaction, regardless of current debate as to meaning, should be integrated in two vital means:

1. The attributes are expressions of human need at a specific point in time and space
2. Those expressions of need, must be articulated as organisational policy (via CSIA)

The implications of the first point would lead to a process that is more client-centred. The process would also have to include aspects of time and place. This dynamic

aspect means that CSIA monitoring has to be built into the organisational system and not merely projects undertaken with start and end dates.

The measured and weighted attributes are predictors of how satisfaction will fluctuate as a barometer to management decision outcomes (or the client interpretation of those outcomes). The resulting post-decision satisfaction level may be viewed as a predictor on client behaviour (in favour of, against, or neutral to). There is added complexity of course; for client behaviour in itself is also subject to other extraneous variables (family, society, personality traits) they may not be know to management. Observed client behaviour may influence several organisational systems and indeed be masked from the original stimulus (management decision outcome) by several intervening variables and delay. Thus, to lower the risk of dissonance with client groups, managers need to utilise instruments to enable them to better understand client values, beliefs, and needs. Satisfaction and job satisfaction measurement instruments offer this insight into client value systems.

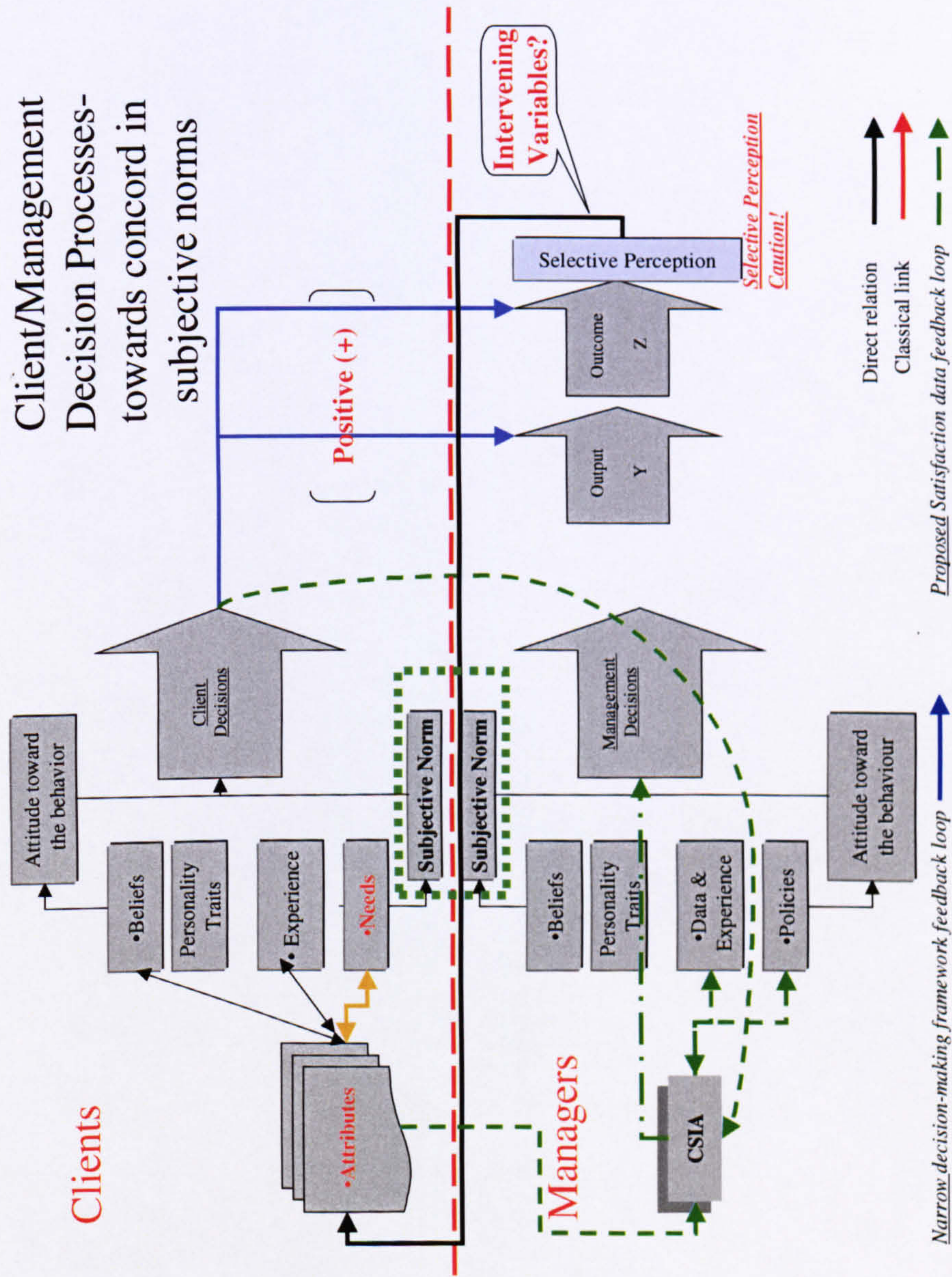
The incorporation of such insight into organisational policy will work to further reduce dissonance by enabling a decision making process that inherently takes into account client values. Effective policies tend to

- ☐ Minimise the influence of external variables on the decision maker,
- ☐ Re-frame the decision in a broader fashion in relevant factors to the context to maximise gains
- ☐ Introduce heuristics to enable pattern recognition and minimise the process of searching for a solutions
- ☐ Keep a written record of what is learned for future use

Variables such as demographics, personality traits, societal norms, and personal beliefs and values, affect decision intentions and behaviour. Thus policies attempt to increase the influence of the organisation by acting as a substitute for a host of variables in order to sway decision-making in favour of desired outcomes; thus creating a alternative subjective norm, while simultaneously promoting beliefs affecting desired behaviours.

It is therefore important, from a managerial perspective, to work towards maximising concord between organisational policy (as an alternate subjective norm, figure 6.8) and the subjective norms of the clients of management (users, staff, medical doctors, and others). The higher the level of overlap (dotted green box) between these two norms, the less dissonance will be experienced by these groups, and therefore higher levels of satisfaction may be achieved.

Figure 6-8: Toward lowering dissonance



6.3.1 Policy and decision complexity

The policy, decision-making, satisfaction model may lead to more efficient and effective organisations. Decision outcomes that cause minimal dissonance between the organisation, its staff, doctors, and patients will result in higher satisfaction levels for all stakeholders, and less resistance to management.

To summarise, decision-making complexity occurs due to factors including:

1. Perceptions versus reality (perception is selective) leading to dissonance or harmony
2. Problems occur simultaneously and are interlinked
3. Information & knowledge constraints
4. Time constraints
5. Complex Multi-attribute analysis
6. Complexity of satisfaction attributes and their association
7. Unforeseen internal and external factors
8. Context of decision-making – urgency, timing, players, etc

The model presented earlier (figures 6.5 & 6.8) can highlight potential pitfalls, warning of the decoupling of attitude and behaviour, process events that risk selective perception, and highlight areas in which attributes of satisfaction interact (at cross purposes).

Thus the model can utilise satisfaction data to enhance decision-making through policy development and reduce ad hoc types of decision-making (figure 6.9).

Feed back loops for continuous managerial learning

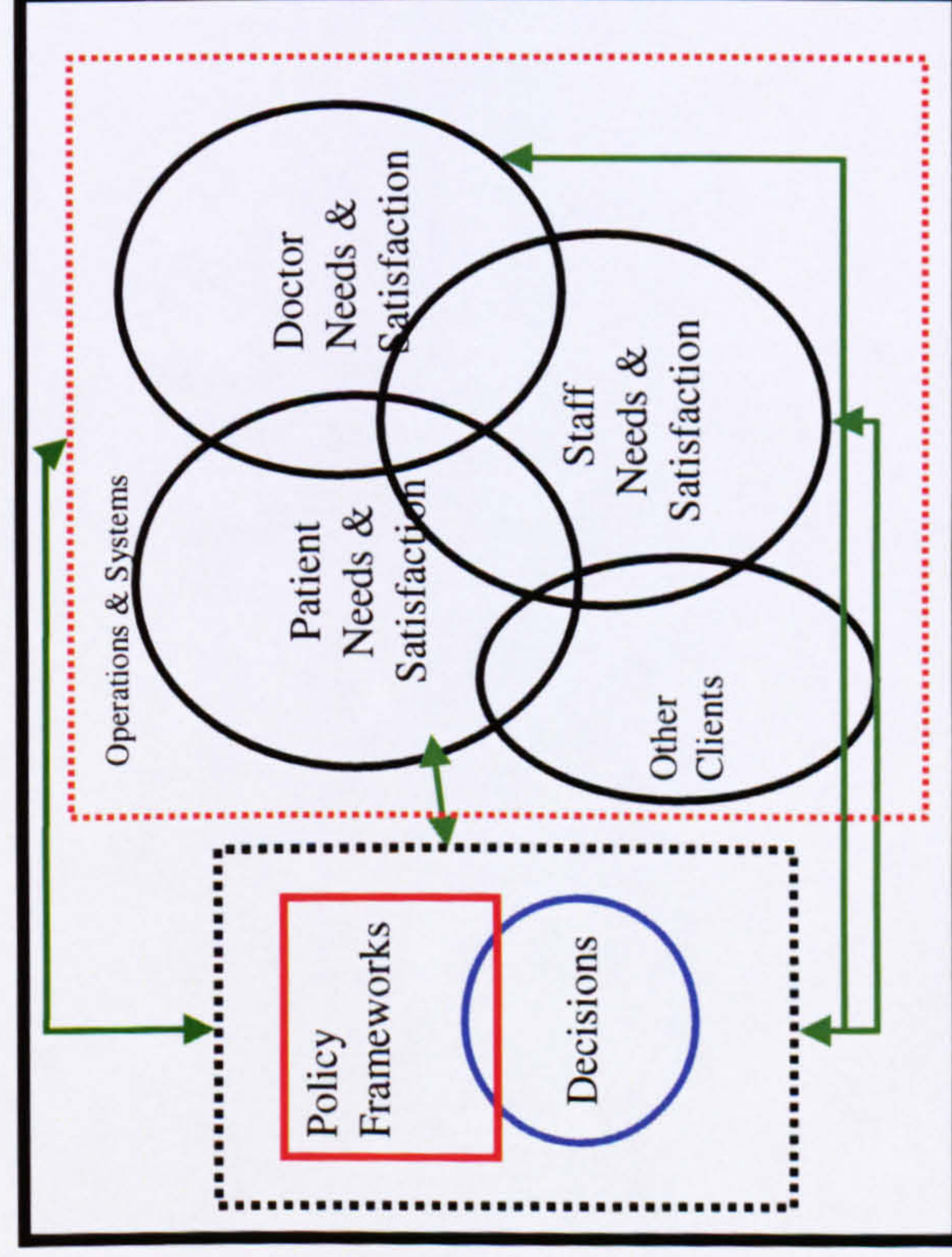


Figure 6-9: Feedback loops for continuous managerial learning

Measurement and analysis of satisfaction and its attributes can lead to successful policy development for it may ensure that this process adheres to certain criteria to minimise the risk of failure or unanticipated (negative) outcomes.

- ☐ Evolving; to address the changing client needs and expectations
- ☐ Inclusionary / Participatory to minimise the effects of selective perception by client groups
- ☐ Account for opposing attributes of satisfaction of the various groups
- ☐ Include incentives to motivate behaviour in the desired directions

Policy development must also act in congruence with recruitment and selection, to ensure internal organisation harmony by accounting for personal traits that will influence behaviour.

This topic of intangibles is most discussed and most difficult to accomplish for it requires long term strategies and commitment. The World Development Report (1997; 92-96) points that

“Motivated staff are the lifeblood of an effective state”. Achieving this is linked to four core action items:

1. Adequate Compensation
2. Merit based recruitment: meritocracy of the civil service helps bring in high quality staff, confers prestige on civil service positions and can do a great deal to motivate good performance. An entrance exam using tough standards can further this idea.
3. Merit based promotion and advancement
4. Esprit de Corps – Building a sense of belonging and purpose

6.4 *Modifying beliefs & attitudes*

Would it be beneficial or even ethical for management to consider influencing client attitudes towards a desired target instead of simply being responsive to them? In many clinical care matters, doctors and health professionals often seek patient behaviour modification to assist in the care plan, therapy and/or recovery.

On matters of systems and organisational policy, managers also do act to influence those around them. Managerial decisions communicate meaning about what is important and influence the organisational culture (subjective norm). Persuasion and other means of communication are used, information is distributed, etc. But should this be pursued in a more structured and systematic manner?

The discrepancy between various client groups' points of view on various issues of satisfaction, and the resulting resistance was pointed out earlier. When situations arise in which the conflict between groups (i.e. staff and doctors) is impacting negatively on operations, management interventions call for the inclusion of strategies that attempt to alter attitudes and change behaviour.

Studies have shown (Fishbein & Azjen, 1975) that attempts to induce change in a given belief, attitude, intention or behaviour must take into account the relation between the variable that is to be changed and the beliefs that are affected most immediately by the influence attempt.

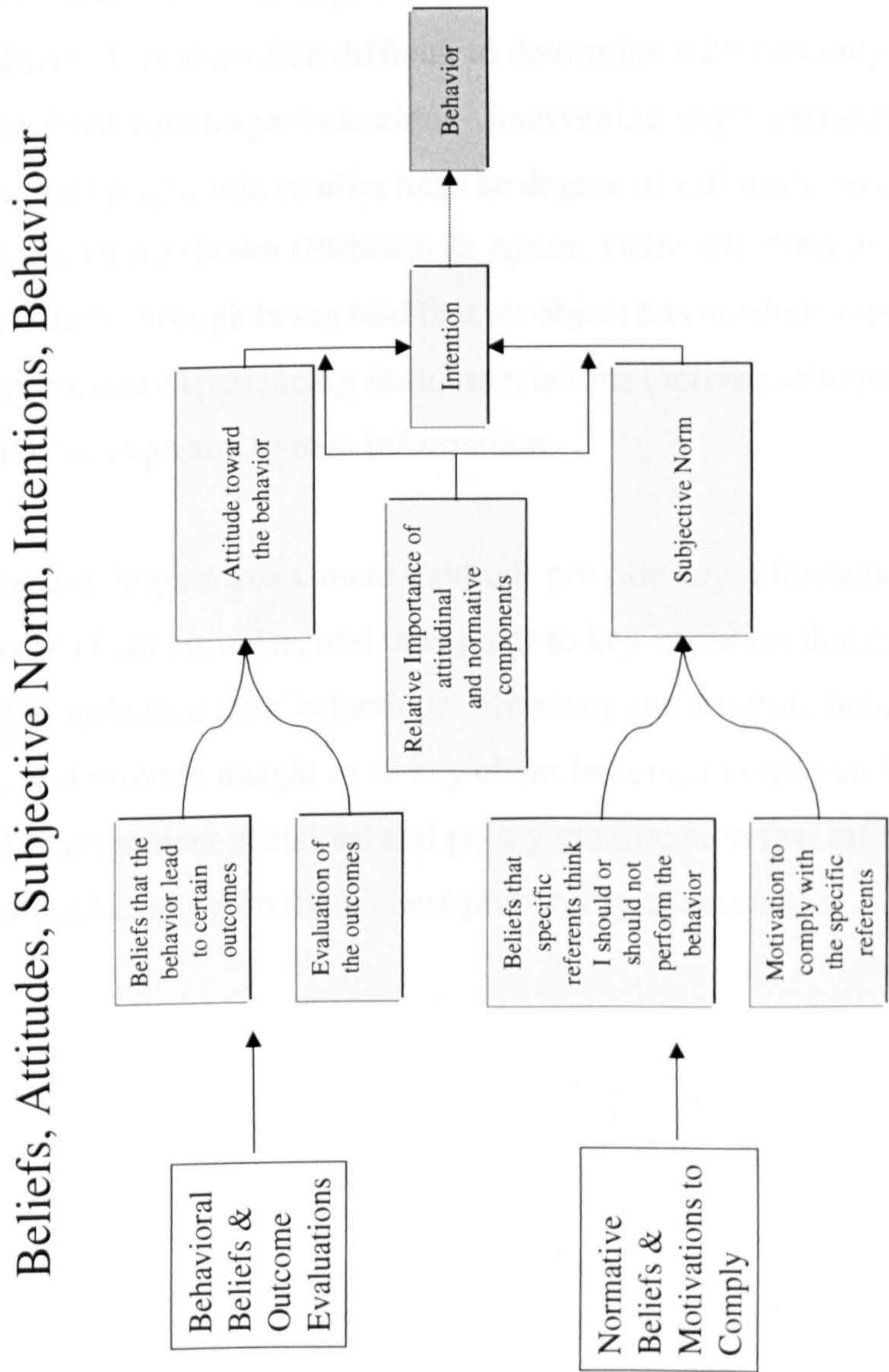
Research in the fields of job satisfaction for doctors and staff reveals unique attributes and in some instances attributes that may clash with management positions on certain issue. For example, pay, autonomy, technology acquisition, use of diagnostics, territoriality, etc. (Cook, 1995; Kaplan, 1996).

This issue highlights the discrepancy between the various stakeholders and beneficiaries in the delivery and management of care. A decision to adjust user fees in either direction will impact differently on stakeholders. For example, a policy decision to adjust user fees in accordance with cost of living increases, may lead to

balanced budgets, and simultaneously, lead to disappointed users and doctors who may view this as limiting access to care. The complexity is often compounded in that it is usually the frontline staff (nurses, technicians, receptionists, etc) that directly observes the reactions to changes in policy. Patients tend to reserve criticism of doctors due to the nature of the medical relationship in that patients desire to maintain “good” relations with their physicians.

Modifying behaviour entails management decisions and policy that influence either directly or indirectly the primary beliefs associated with the desired target (dependent variable). It also may include attempts at changing the evaluations of attributes believed to be linked to the target (figure 6.10). For example, management seeking to promote the competence of its medical staff as a marketing strategy, may actively promote the importance of doctors’ credentials, thus influencing patients’ association of credentials to quality, and/or aim to have users spend more time in consultations with doctors, and provide information related to the diseases or illness (attributes known to be associated with user valuation of quality and competence). Both strategies may work synergistically to increase patient loyalty to a particular medical facility or practitioner.

Figure 6-10: Beliefs, attitudes, subjective norm, intentions and behaviour



Source: Ajzen & Fishbein, Understanding Attitudes & Predicting Social Behavior, Page 100

The challenge facing management in such situations is in selecting the appropriate target behaviour and its determinant beliefs (primacy beliefs). Primary beliefs are often associated with other proximal and inferential belief sets. Inferential beliefs are those formed on the basis of other beliefs an individual may hold. Thus proximal beliefs affect the primary beliefs as a result of various attributes the persons associates with an object, and in turn; those primary beliefs affect a set of inferential beliefs about that object. It is also often difficult to determine with certainty the precise belief(s) associated with target behaviour. Intervening steps, extraneous variables, other associations play a role in affecting the degree of influence on target behaviour. However, studies have shown (Fishbein & Ajzen, 1975: 451-509) that two clear ways to influence beliefs through being told that an object has attributes (persuasive communication), and experiencing such associations (active participation). Both processes involve exposure to new information.

Client satisfaction impact assessment methods provide key information as to determinants of client attitudes, and thus point to key variables that can be manipulated to influence their behaviour. Knowing the attribute hierarchy of client satisfaction, will provide insight as to key client beliefs, and may enable more focused and directed management decisions and policy modification that influence those attributes (or predictors) with the highest probability of success.

6.5 Communicating and management

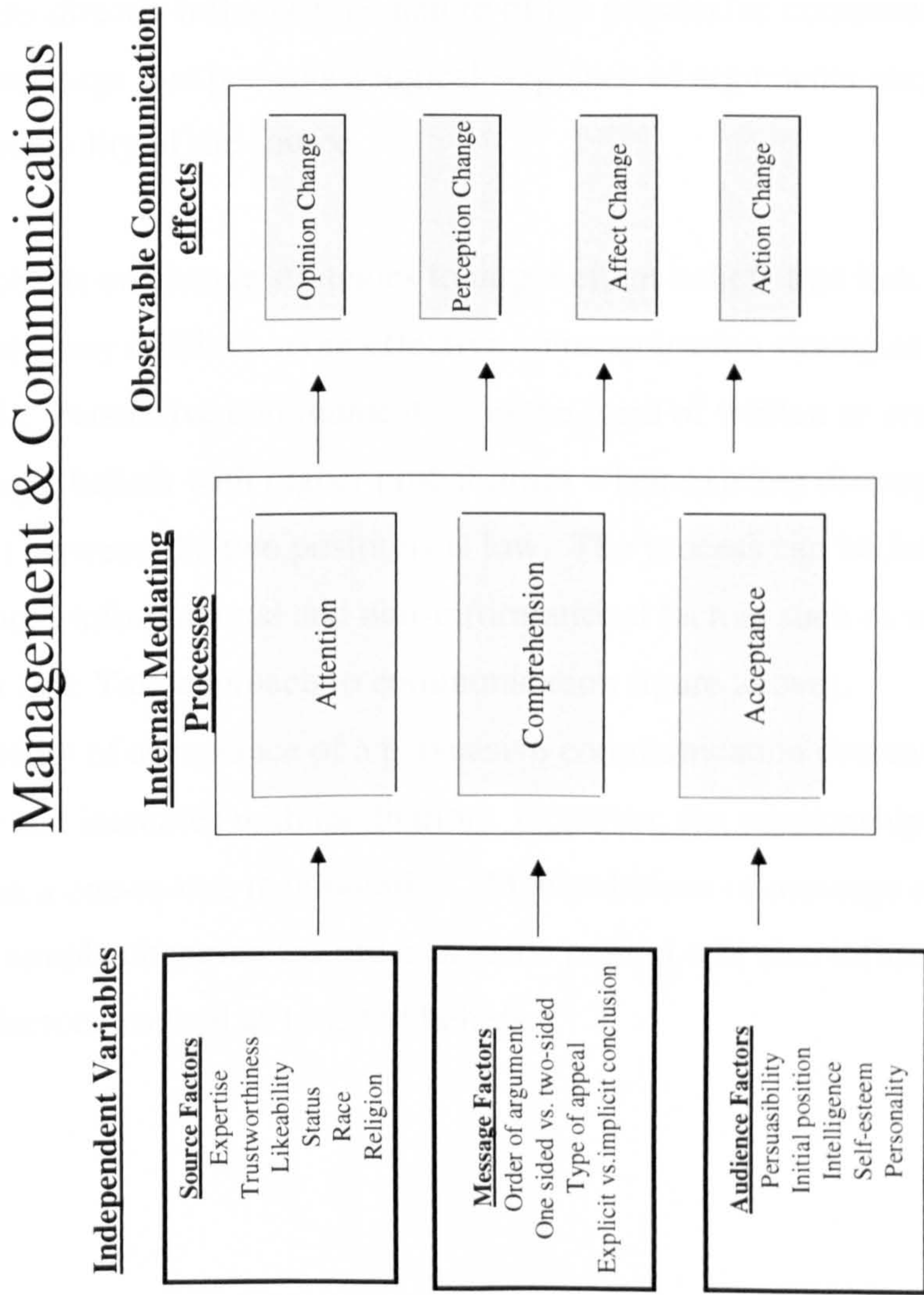
Successful management may model decision-making through the processes outlined earlier. Decisions need to also be successfully communicated (marketed) to management clients (stakeholders). While the model outlined earlier is intended to minimise dissonance resulting from management decisions through incorporating client needs and expectations at the policy and decision processes, communicating decisions remains of paramount importance.

Understanding how clients arrive at decisions, may lead to presentation of information in the appropriate framework to maximise acceptability. It was noted earlier that the framework of a question or decision process has been shown to effect choice (Tversky, 1981). Prospect theory (Kahneman, 1979) holds that “losses loom larger”, thus presenting policy and decisions in to way to show minimal loss (if any) and more gain, may result in better “acceptability” than a more direct scientific presentation. Additionally risk-aversion and the certainty principle (see section 3.2.4) may be factored into framing the communication strategy.

Managerial skills and abilities in communicating clearly and directly to clients have been repeatedly (Eade, 1996) found to be critical factors to success. Successful communication requires transmitting stimuli (usually verbal) to modify the behaviour of other individuals. According to the Yale approach (figure 6.11), “attention and comprehension determine what the recipient will learn concerning the content of the communicator’s message; other process, involving changes in motivation, are assumed to determine whether or not he will accept or adopt what he learns”. (Janis & Hovland, 1959).

Thus in this model below (figure 6.11), both learning about the contents of a message, and the acceptance of those contents are key to success.

Figure 6-11: Yale Approach to Communication



Yale Communication Program – Yale Approach to Communication and Persuasion
 (Based on Janis & Hovland, 1959)
 Source: Ajzen & Fishbein,
 Understanding Attitudes & Predicting Social Behavior, Page 453

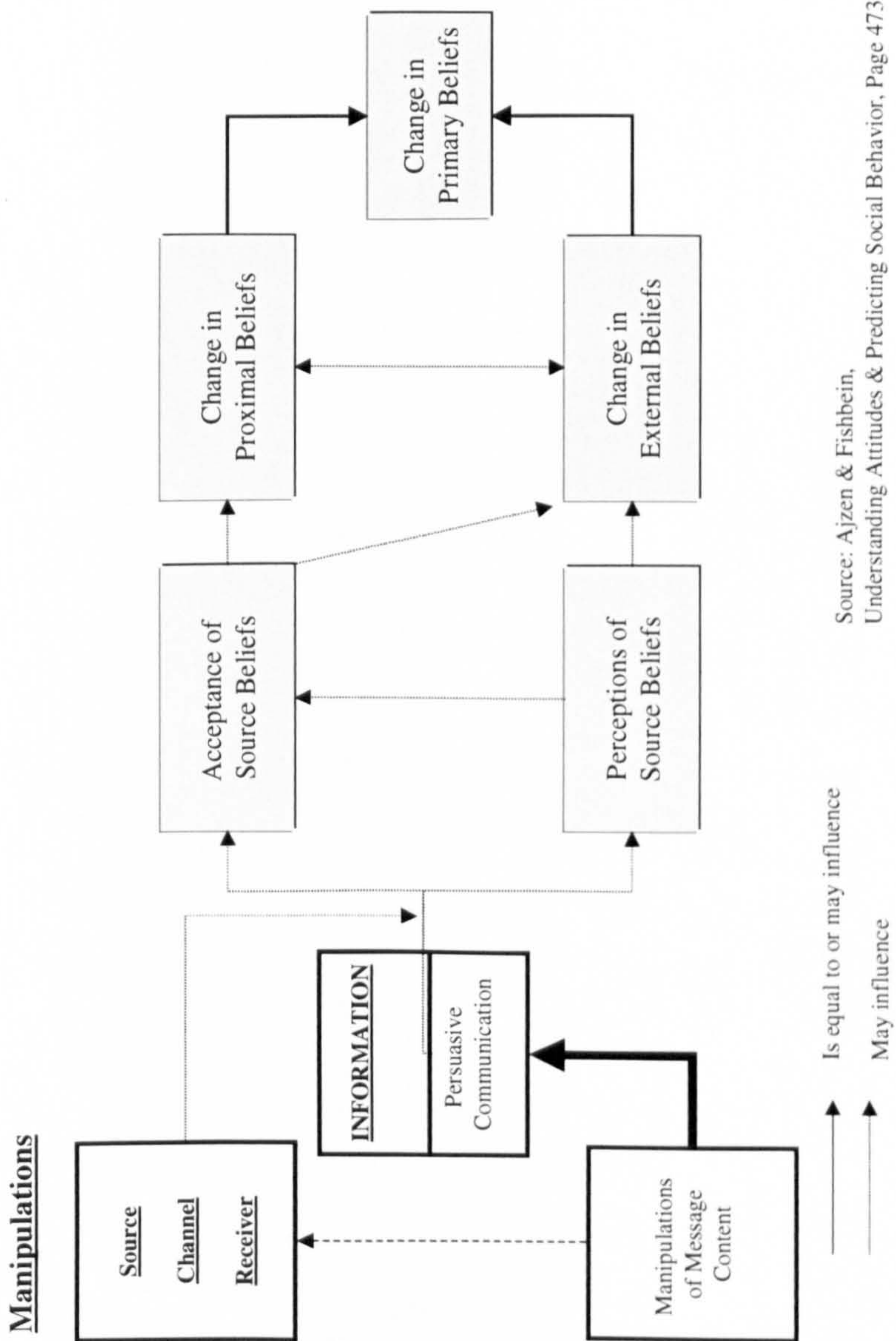
In light of the unified model presented earlier, “acceptance” will be difficult to achieve when dissonance exists between clients and management. Moreover, the process of selective perception will affect comprehension. Additionally, clients’ attention will, by definition, tend to be elevated for issues of more importance to those clients (top of the list on the attribute hierarchy). Figure 6.12 (Fishbein & Ajzen, 1975) below illustrates the impact of persuasive communications on target beliefs, as well as possible sources of manipulation. The heavy arrow indicates that message manipulations directly influence the nature of the persuasive communication. For example, a message that presents a logical sequence of arguments may enhance the perceived credibility of the source.

Placing emphasis on change strategies to target client beliefs that link an object to some attribute may facilitate more effective communication strategies (Fishbein & Ajzen, 1975). Persuasive communication in the form of written or oral messages can influence target beliefs with higher probabilities when existing discrepancies (dissonance) between the two positions is low. The process can be facilitated by examining both informational and non-informational factors such as source, message and receiver (see Yale approach to communication figure above).

Thus probability of acceptance of a persuasive communication decreases with discrepancy and increases with facilitation. However, the relationship is more complex than a one-to-one manipulation. Manipulations of message content (for example by simply changing the order of same points) will also influence the facilitating factors, as well as targeted beliefs.

Figure 6-12: Fishbein & Ajzen Model for Persuasive Communication Process

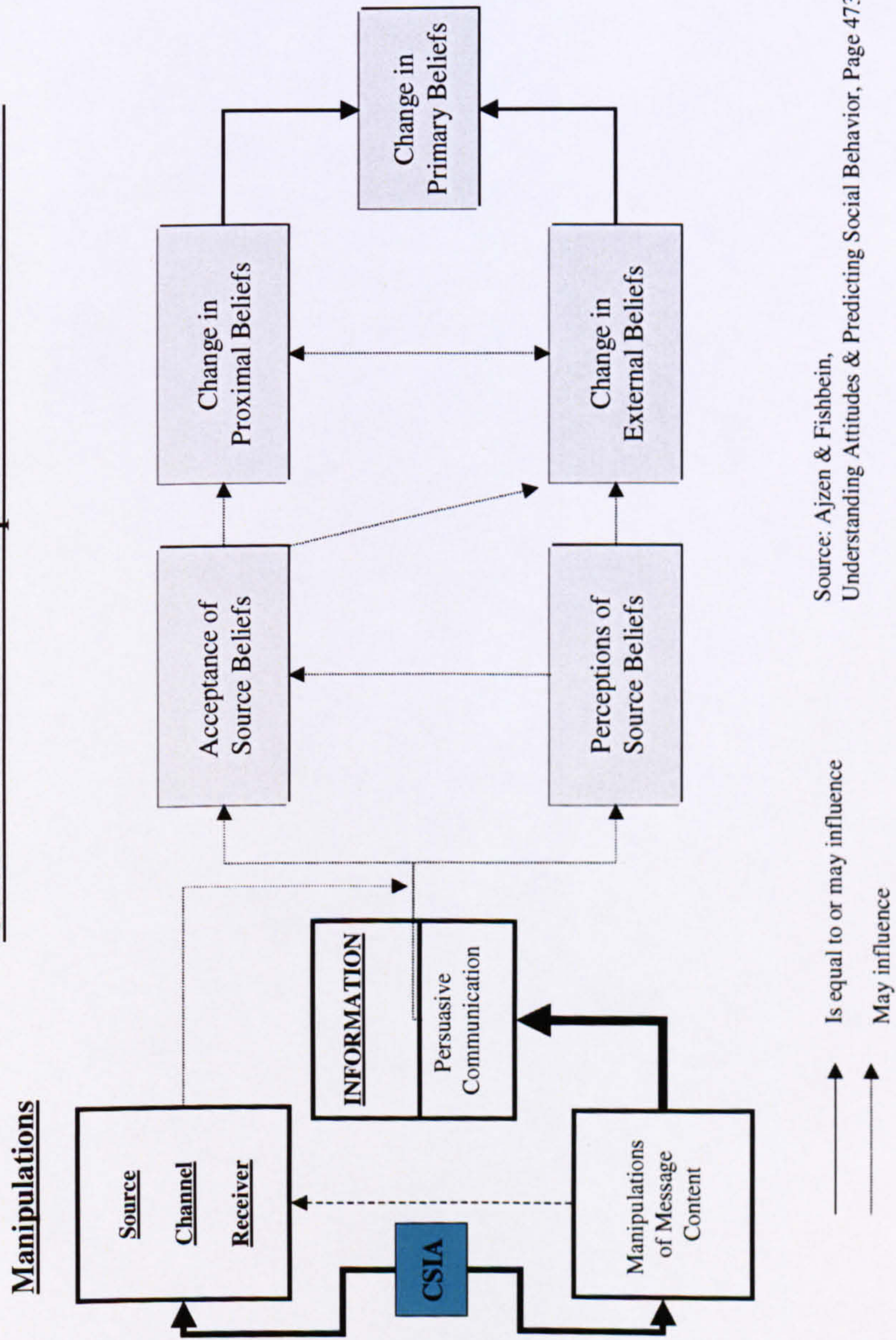
Persuasive Communication Process



Client satisfaction impact assessment may have a key role to play here; by bringing to the forefront key attributes of client beliefs. Such a dynamic may enable more effective manipulation of the facilitating factors including message content. The illustration below (figure 6.13) highlights the role of CSIA in persuasive communication processes.

Figure 6-13: Persuasive Communication Process and CSIA

Persuasive Communication Process & Client Satisfaction Impact Assessment CSIA



Source: Ajzen & Fishbein,
Understanding Attitudes & Predicting Social Behavior, Page 473

6.6 *Practical CSIA applications*

Market research done (Bagnell, 1998) to better understand the new healthcare consumer, points to information needs that will “assist in developing, promoting, and delivering products and services of maximum value to current and prospective consumers.”; As well as the needs for operationalising initiatives for change involving building information infrastructures of extensive content and customer databases, using new technologies to customise communications and ultimately service components.

In today’s competitive and complex world, managers cannot afford to inadvertently repeat past mistakes, use trial and error tactics, and/or enact policies that work at cross-purposes. The proposed unified model linking policy, decision-making and satisfaction outlined above, is intended to serve as a framework coupled with CSIA tools to bring more harmony into the complex world of healthcare organisations.

Its use and application in the “real” world is feasible without necessarily adding more complexity and workload to management. It proposes that all processes leading to any major decision must ask questions of impact on client needs (and satisfaction), and are therefore required to maintain and contribute to increased harmony amongst client groups. Achieving this requires continuous monitoring and measurement of those needs as expressed in the current studies of satisfaction and its attributes. More effective management (exhibiting reduced position discrepancy and increased compliance) can result when senior level decisions explicitly address and account for the predictors and attributes of satisfaction of users, doctors, and staff in all major decisions.

At the user level, monitoring of satisfaction attributes is a reflection of human needs (both current and latent), and will therefore enable managers to better understand user/patient healthcare seeking behaviour. Such an understanding can inform policies and decisions that will both predict and influence user/patient behaviour. This

behaviour may include compliance with clinical instructions and/or loyalty to a facility/provider.

Secondly, at the doctor and staff levels, monitoring of satisfaction attributes may enable managers to better predict policy and decision outcomes on employee morale, esprit-de-corps, loyalty and possibly productivity. It will also permit managers to steer a course of action that avoids employee-organisation dissonance. Moreover, knowing current and latent employee needs will enable managers to influence key stakeholders, and to position their organisations more competitively in the market place.

To achieve the above, choosing which management efficiency and effectiveness monitoring indicators is crucial. To lower dissonance and be reflective of client needs and expectations, indicators that measure these variables must be integrated into the daily operations of a healthcare facility. The choice of indicators and parameters to monitor must have ownership from senior management, be explicitly linked to policy and decision processes, and evolve over time with the changing needs of clients.

CSIA methods may offer a range of indicators to both inform policy or decision-making and monitor outcome progress. This process may be analogous to environmental impact assessments now demanded by so many governments prior to final approvals on a host of capital projects and development. Senior healthcare policy and decision makers need to therefore embark on client satisfaction impact assessments when examining choices, consequences and decision outcomes. It is critical to seek input from users, staff and doctors.

Additionally, CSIA may enable managers to utilise more directed and effective communication strategies with higher probabilities of acceptance by targeted clients. It does this by conveying relevant information addressing client beliefs, extent of existing position discrepancy(s), and other facilitating factors linked to message content and form (or frame).

The tools offered in this study: exit questionnaire, household survey, focus groups, and the methods of analysis: attribute colour hierarchy grid, monitoring attribute

frequency, mean, and ratios will lead to more effective decisions causing less client-management dissonance, increased client loyalty, and management systems that continuously learn and adapt to changing contexts and human needs. Tools and methods must be employed with caution. Monitoring both at the household level and at the facility level may yield differing results, and interpretation has to account for setting, timing, and careful design.

7 Conclusion

Macfarlane (1996) points that despite the challenges and the paucity of hard evidence pointing to the benefits of user participation in policymaking, broad citizen participation in healthcare policy reform is a desirable goal. However, the capacity for genuine collaboration remains underdeveloped and requires more systematic refinement.

Newer and more practical satisfaction monitoring instruments may evolve that combine speed and accuracy. However, the intangible nature of satisfaction and its expression will require diligent monitoring, communicating and continuous assessment by healthcare organisational systems. Given the nature of decision-making processes, coupled with the added complexity in healthcare, conceptual modelling is best suited to attempt to bring about more effective decision-making and policy development. Data interpretation needs to deliberately account for both current gaps in the understanding of true meanings of the phenomenon of satisfaction, as well as observed individual differences in how clients arrive at, express, and change satisfaction.

Further studies need to more closely examine, in a comparative sense, similar healthcare organisations while aiming to compare decision-making and policy development processes to yield valuable information as to how clients perceive decisions and policies, and the factors involved in selective perception. Variables across organisations would have to be standardised to control for both internal and external factors including management styles and systems, client profiles, and catchment areas. Testing the validity of the model presented in this dissertation can be carried out in the West Bank once local conditions are appropriate in terms of political stability.

The key findings in this thesis point to several fundamental factors that senior healthcare managers must account for in both decision making and policy formulation:

- ❑ Satisfaction is a complex and dynamic phenomenon, not easily or directly statistically measurable, that is simultaneously reflective of client beliefs,

expectations, and needs; and often key determinant of clients' observed behaviour;

- ❑ Some important satisfaction attributes of the three main client groups (patients, staff, and doctors) are not independent of each other, and do interact, at times in opposing directions, and are affected by management decisions both directly and indirectly; decisions ripple through an organisation and are perceived differently from different groups.
- ❑ Client satisfaction impact assessment (CSIA) tools & the unified model presented earlier (section 6.3) are proposed as decision-aiding tools to enable both better decisions and policy change forecasting as to impact on client satisfaction. As well as the systematic incorporation of client needs at the senior management levels thus avoiding intra and inter-organisational dissonance (management-client position discrepancy) that may yield non-compliance, resistance to intended outcomes, and/or increased decision-outcome uncertainty.
- ❑ Communicating decisions is of equal importance and complements the decision making process: a poorly communicated sound decision is equally detrimental as a properly expressed mediocre decision. Persuasive communications tools (section 6.5) must also be framed and presented to clients in manners compatible with their beliefs and priorities. Human behaviour and decision-making models point to inconsistencies in the manner in which individuals decide (section 3.2). Managers need to be cognisant of such realities when formulating both content and form of communications strategies for various target groups.

From the client viewpoint, such findings may provide management with tools to enable a paradigm shift that ensures the voices of key stakeholders in healthcare systems are heard. Such a model would be expected to influence systems to work synergistically in achieving organisational goals and objectives.

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9 Appendix I: exit survey

Translated from Arabic

Clinics	Lab	X-ray	Surgery
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Time _____
Date _____

How did you hear about this centre

Doctor	Pharmacist	Friend	Media	Insurance	Other
--------	------------	--------	-------	-----------	-------

First Visit? Y N

Please rate the following:

Reception	Excellent	Good	Ok	Poor	Cannot rate
Medical Care	Excellent	Good	Ok	Poor	Cannot rate
Cleanliness	Excellent	Good	Ok	Poor	Cannot rate
Environment	Excellent	Good	Ok	Poor	Cannot rate

Please rate the time to complete your X-ray or lab results? OK Not OK

Overall, did you feel cared for? Y N

Overall, did we me meet your needs? Y N

Please add in the space below any further comments or suggestions

Procedures and Instructions given to questionnaire distributors:

- 1. Weekly meeting held to review progress and comments
- 2. Standardised opening statement
- 3. Not to watch as people complete the survey
- 4. Provide box to drop off to assure confidentiality
- 5. Attempt to hand to every 20th person walking out of the elevator
- 6. Log book to record how many given and what times

10 Appendix II: focus group discussion transcripts

Note Taker 1: Ms. Majida Awashreh

Note Taker 2: Ms. Joviana Stephan

Facilitator: Mr. Ma'moun Abu-Arkoub

All session notes taken in Arabic.

Translation of Transcripts (Arabic – English): Ms. Joviana Stephan

10.1 Users/Patients

10.1.1 Note taker 1

Q1: How do you choose a medical facility for your own treatment?

1. Medical Equipment on all levels have shortage; labs , patients rooms and surgery rooms. The staff don't work hard to give attention to the patient as expected and doesn't try to please the patient.
2. I expect giving more importance to the technical preparations and treat the patient as a human being and not a number in the line up.
3. You talked about disadvantages: what do you expect when entering a clinic.
4. Equipment: I don't see the equipment we need, there is always shortage. I would like to find all the equipment in the same centre. We find it in Israel but it is difficult to travel there.
5. We expect to supply all the needs, the machines are very expensive , where are we going to get from, it is hard to afford them.
6. The medical insurance is taken from the employees salary. Where does the money go and how about the fund raising money??
7. Cleanness: As a patient it is impossible to go to a hospital; bugs, mistreatment and not clean. Increase in the income and the work hours would make the place cleaner.
8. The staff is not enough. This includes Doctors and technicians.
9. The doctor doesn't use the same standards in his medical treatment in the public sector as he does in his private clinic.
10. Not supplying the needed check ups and the services the patient requires.

11. No attention is given to the patient's life and feelings, no care for his psychological well being. (Not treating the patient the same way the Israeli hospitals do).
12. Ambulances: not responding to phone calls. .The cars are not equipped for the needed level.
13. A problem in communication between the patient and the medical body. The patient is not informed about the different levels and kinds of treatments, equipment and medical centres.
14. Shortage of specialised Doctors most of the time. Lack of financial incentives for the doctors.
15. Provide more (assistant professionals) to save time and effort on the doctor's side and improve the service.
16. No appreciation from the public for the doctors efforts. The doctors leave or stay abroad.
17. (There should be control on the expired medications and smuggled ones. Provide more supply and education for their use) .
18. (Talking to the patient family and explain the (medical problem). Continues education for the workers and the doctors).

Q2: What should this medical facility focus on to meet your needs and expectations?

Factors that influence the choice of medical provider:

1. The publicity or the reputation of the doctor or the institution.
2. The easy payment arrangements and the psychological preparation.
3. The clean place, good reputation and the doctor's competence.
4. If there is financial security I would stay away from the public institutions because they don't provide adequate service and they are crowded.
5. There is more support for the private institutions. They have the recourses to provide good service and up-to-date equipment (more trust in the private centres).
6. The external appearance of the institution (psychological factors).
7. Try and use more than one institution to see the difference in the service levels.
8. Provide the patient with information about the institution and the services provided.
9. Generalisation from a private and personal experience.
10. Not to be transferred from one centre to another to get the medical care needed.

11. Where the patient doesn't have to wait for a long time to get service.

Q3: What factors would cause you not to return to a medical facility?

1. Wrong diagnosis
2. Bad treatment
3. Shortage of equipment
4. No excellent customer service.
5. Being disorganised, late and negligence.
6. Lack of conveniences.
7. Psychological factors.
8. Care quality is more important than the expenses.
9. No control and supervision on the doctors and medical workers. (abusing the human rights, the patient freedom and rights)
10. Lack of general law (no public guidelines). Lack of punishment causes chaos.
11. Lack of health awareness.
12. Lack of doctors' honesty and sharing.
13. Bad reputation (for the institution that doesn't hurt the patient).

Q4: What aspects (external) influence your decision when choosing a medical facility?

1. Bad reputation. (Reflects experience and internal factors).
2. Presence of medical preparations and staff in the hospital.
3. The financial situation of the patient (in general for the Palestinian people).
4. Type of medical problem.
5. Trust in the doctor (the family doctor than the referral part).

Q5: In your opinion, what are the most important factors contributing to good medical care? Please rank in order of importance (1: most important)

1. The staff and the supplies are interconnected. What is the use of the medical supplies without a qualified staff?
2. The combination of the doctor and the equipment give the patient the confidence and trust, more than using manual diagnosis only without medical equipment.

Q6: Rank the top seven items on the sheets provided in order of importance (1: most important)

- The doctor's Competence.

10.1.2 Note taker 2

Q1: How do you choose a medical facility for your own treatment?

1. Provide supplies and equipment, the existing ones are not enough. The staff doesn't make effort even when it is possible. The patient is not treated as a human being.
2. There is shortage in the medical equipment. A need to provide Labs and X-ray rooms.
3. Provide all the supplies and machines like dialysis.
4. The hospitals get funding but nothing have changed. Cleanness is not available but mistreatment of the patient is there.
5. Not enough staff. Not enough doctors and specialists.
6. No technicians for the medical equipment.
7. Professional honesty is missing, the doctor treats the patient different in his clinic than in the public clinics.
8. The essential and needed services are not provided.
9. The medically insured patient is not well taken care of. There is negligence and no human appreciation.
10. Phoning the hospital is a nightmare. Nobody answers the phone. The Ambulances cars are not well equipped. The hospitals are not prepared for the cancer patients, we have to go to Israel for that. Mistreatment. Heart patients die.
11. There are special ambulances ICU.
12. Having the wrong doctor for the wrong patient. Doctor shortage is because of low salaries.
13. Give [pay] raise to the doctor.
14. There is a big load on the doctor. Having more assistant technicians and staff would reduce that.
15. There are doctors but no incentives.
16. No appreciation for the doctor. The institution should provide more courses and work shops for the doctors to increase their awareness and motivate them.

Q2: What should this medical facility focus on to meet your needs and expectations?

1. Good reputation and convenient location.
2. Doctor's reputation and the centre's location, like Haifa's hospital on the beach.
3. Reputation from other people.
4. Competent doctors.
5. Prefer the private hospital on the public one. If the financial situation is good I would go to private.
6. The patient, who can't afford private care, keeps changing public institution until the treatment is achieved.
7. The appearance of the building.
8. Publicity.
9. The institution's reputation, the sufficiency of equipment and not to being transferred from one centre to another.

Q3: What factors would cause you not to return to a medical facility?

1. Wrong diagnosis.
2. Bad treatment.
3. Services provided and equipment.
4. Lack of quick service. Chaos in the working place, lack of knowledge of the doctor's location, negligence.
5. Psychological factors and the services expected.
6. People go to Jordan
7. No control or supervision.
8. There should be regulations. No consideration for patients lives, this is not the way they are treated abroad.
9. If a patient dies they say "Gods Will". Doctor's negligence.
10. Lack of health awareness , no education regarding that.
11. Lack of walk-in doctor and shifts between doctors.
12. Lack of punishment "consequences" is the reason for the negligence. The bad reputation doesn't affect the doctor but the institution.

Q4: What aspects (external) influence your decision when choosing a medical facility?

1. Good reputation.

2. Financial capacity of the patient.
3. The doctor in need.
4. Trust in the family doctor.
5. The competence of the doctors and the hospital capacity.
6. Financially.

Q5: In your opinion, what are the most important factors contributing to good medical care? Please rank in order of importance (1: most important)

1. Competent doctors.
2. Service and equipment.
3. Staff and trust.
4. Competent doctors.
5. Medical equipment.
6. First the competence of the doctors then the available equipment.
7. Presence of good doctors is no use without the up-to-date equipment.
8. The connection between the doctors and the equipment.

Q6: Rank the top seven items on the sheets provided in order of importance (1: most important)

Doctor's competence.

10.2 Staff

10.2.1 Note taker 1

Q1: As staff, in order to meet your expectations and satisfy your needs, what are the most important aspects a medical facility must provide? (Clinically, physically, emotionally, amenities, etc.)

1. The clinics mainly concentrate on the medical side of the treatment, no importance is given to the social and psychological condition of the patient.
2. Are you asking me if I were satisfied with my job??
3. I use my contacts to treat my family so I don't worry about this problem.
4. The institution has to be successful.
5. When the employee is sick and can't take sick leave this means he doesn't have full rights.
6. Do your job and you will get your rights.

7. Shifts: the employee has to do his job perfectly and fully, if he missed his shift it should be on his expense and not the institution.
8. Facilitate the health insurance.
9. Financial issues.
10. Salary: the public sector employee leaves his job and joins the private sector for the better salary.
11. Lack of day cares close to the institutions for the workers infants.
12. Lack of frame of reference: there should be an institutional constitution and regulations, like the health insurance in the private sector.
13. Double standards: (the private institutions take what suits them from the government regulations and add it to their own).
14. The stress on the duties and forget the rights.
15. Lack of evaluation
16. Use the contacts system to employ staff and ignore the qualified personnel.
17. Results: less productivity with the lack of incentives.
18. Lack of appropriate duty distribution.
19. If the regulations existed we could use them as references.
20. The experience of the staff is more important than the degree.
21. Provide a course for the new employees (especially the new graduates) about their duties and rights and the salaries, makes everything clear from the beginning.
22. The purpose of the course is to explain the management aspects of the institution which differ from one to another.
23. Every head of department should know those aspects and not only the top manager.
24. Qualifications should be the first resort in employing.
25. Advertise for the job; give a chance for fair competition.
26. Presence of special committee to interview the applicant.
27. Have job description.
28. Follow-up, evaluation and continues motivation.
29. Shortage in qualified people. Absence of team spirit and open discussion.
30. Nurturing the employee energy so he can give more.
31. Punctuality.
32. Raises: a certain percentage at the end of the year without evaluation.

33. No cooperation among the health institutions, the health employee on institute is treated as a regular client in another centre when paying expenses.
34. Lack of incentives. Concentrating on a certain group of the staff and ignoring the others, this depresses the employee.
35. The employees are shield of what is going on at work.
The opportunities are grasped by the employees who know about it only. There is no monthly evaluation.
36. The degree [pay increment]system in the government: every four years the employee gets one degree, this is not an incentive to work better, because all the employees get it whether they work hard or not.
37. The organisation sets the regulation for the clients.
38. The Bureaucracy in the institution is a waste of time.

Q2: To do your job right, what factors are most important (internal to your organisation)

External factors:

1. The institution authority: is it effected by the Health ministry influence on regulating the work inside the institution , or is it the external effects like the transportation.
2. lack of health policy or plan from the health ministry. The efforts are scattered between serving the client and being a health employee.
3. Media: The effect of media on educating the population. The media has a part in the health awareness.
4. Educate the employee of the other and higher regulations that are beyond his institution. This is considered as an external factor that effects the decisions of an institution.
5. (Lack of institutional cooperation). Lack of sharing the research experience.
6. Lack of co-ordination - transfer problem.
7. The employee gets frustrated if he knew that what he achieved was not applied or was there from before and nobody mentioned it.
8. Internal conflicts effect the employee efficiency and productivity.
9. Encourage the Unions role and their relations with the health institution.

10. The Salary for the same job differs from one institution to another (Salary discrepancy). There is a need for salary unity and apply the institutional regulations.
11. The expertise are moving to the private sectors from the public one.
12. Comparing the salary of different institutions and have a plan to improve the salary situation especially with its relation to the inflation.
13. Co-ordination between the health institutions in all cities and create relations with other employees. As an ambulance driver I don't know to whom I should go in [city of] Nablus.
14. Face to face communication and have an open relationship. This makes the employee more productive.
15. The political situation: The closure, checkpoints. Some institutions take those days out of the employee holidays or of his salary. There should be same regulations in all institutions regarding this.
16. The regulations differ from one ministry to another; the maternity leave is 3 months in education ministry and this was not applied in the health ministry.
17. Sick leave: " depends on the approval of the committee in the health ministry".
18. Residence problem: the distance between the work location and where the employee lives. Compensate the transportation.
19. Shortage of supporting technical equipment in the institutions.
20. Cultural problem: A problem at work could be solved better in an open minded (educated) environment.
21. Service distribution should follow population distribution.
22. The health ministry is the problem: they are kicking us out. Why they didn't improve the situation instead of closing the centre though there were 400-600 patients (the physiotherapy centre).
23. The situation is lose and not well constructed: Not enough space to do the work or even have a desk, and lack of needed equipment.

Q3 : What are the characteristics of a good medical facility? Rank them please in order of important (1: most important)

1. Provide good salaries.
2. Choose the right employee.
3. One same system for all the employees

4. The Location of the institution.
5. Improve the financial situation.
6. Has the needed medical equipment to work.

Q4: What internal event (decision or action) would make you want to leave your organisation?

Reasons to leave the institution:

1. Being suppressed: nobody appreciates your efforts.
2. No evaluation
3. No appreciation from the institution or the public
4. It is not only material, you have to be happy in your work.
5. Contacts effect: It irritates me to deal with low self-esteem employee.
6. Mostly psychological: doesn't matter the reason, either financially or unproductive institutional system.
7. Mismanagement in the institution: The manager can't solve the problem at work, the employee has to do it himself.
8. Lack of proper rights for the employee, either financially or psychologically. Overtime is not paid.
9. There are better opportunities outside the institution. Either better salary or position.
10. Lack of compatibility between my qualifications and the job description. The Institutional policy is not clear.
11. Experience showed us that there is no compatibility between the institution nature and the qualification (coming from abroad).
12. The relationship with the institution is like a marriage, it reaches divorce at some point.
13. Mismanagement: equipment out of order, no water, no extra staff, and dirty washrooms. All of this affects the employees (under my supervision) and leads to stress at work.
14. Loosing trust in the institution ability. The employee solves the problems by himself.
15. Presence of social worker helps release some stress at the work place.
16. The decisions are not well studied and don't work for the long run.
17. Distance from the employees; lack of knowledge of their problems.

18. When consulting the employee he might give his opinion, but mostly he keeps to himself, there is no open relationship between the administration and the staff.
19. Following “tailing” the management and the bureaucracy. Accumulation of problems, the public expects you, since you are dealing with them, to solve the problem, the management doesn’t care or provide solutions.
20. Working in two different institutions at the same time creates detachment from both and less honesty. The employee would leave one of the institutions eventually. The experience taught us not to work two part time jobs but full time so we will be able to leave.

Q5: For patients to receive good care, what are the most important aspects? Please write on the sheet provided;

1. Priorities and regulations to ensure the best service for the client.
2. Quick service
3. Sufficient equipment
4. Good treatment and nice atmosphere.
5. Good working environment for the employee since he is the direct connection to the client.
6. Sufficient equipment.
7. Welcoming the patient in a nice manner.
8. Best care for the patient (proper facilities)
9. The employee role is more important than facilities. It is still possible to transfer somewhere else.
10. The employee should bare these characteristics:
11. Avoid mixing the professional problems with serving the client.
12. Moodiness with the client.
13. Presence of the red line between the employee and the client. Having rules and regulations for the relationship.
14. Welcoming the patient , having good manners especially for the staff that has direct contact with the public.
15. Punctuality in the appointments. Good reception, medical supplies.
16. The staff number should meet the amount of work in the institution.
17. All the problems are around the employee, if you solved his problems the patient would be better off too.

18. The priority is to find the qualified employee for the job, everything descends from there. This would lead to better and faster growth of the institution.
19. The location: Being in a place where there is no service; good distribution of the service
20. Working hard for the comfort of the client means good reputation for the institution.

***Q6:** If patients are presented with the following list (appendix 2), how would they rank the items from 1 to 7 (1 being most important to 10 least - you may give items similar ranking.*

- See pages 117, 118 for results

10.3 Medical doctors

10.3.1 Note taker 1

***Q1:** In order to meet your expectations and satisfy your needs, what are the most important aspects a medical facility must provide either as a doctor or for your patients? (Clinically, physically, emotionally, amenities, etc.)*

1. What is the medical institution. Which sector??
2. What are the factors??
3. Number of medical providers , levels of providers
4. Studying the existing situation. Supply a plan. The discrepancy between Gaza and the West Bank. The health situation in all sectors is disorganised. The information supplied from the different sectors are not enough to improve the health sector.
5. The doctors definition of Service Quality varies. It should start from receiving the patient up to the medical tests and the treatment. Is it what are we aiming for, or what is existing now?? The most important thing is the service and the comfort of the patient. Full service for the patient: some medical tests are not available in the public sector so the patient goes to Israel. Patient Family: We have to educate the family about the patient condition, If we didn't expect much from the family they would have trust in the doctor and institution. The transfer process adds burden on the family. Educate them about the diet for the patient if there was a special one.

6. Serving the patient: efficient staff, full staff in different hospitals, the use of the insurance.
7. Talking more about specific issues and their relation to the financial situation of the patient:
8. Private or public?
9. Good medical care
10. Equipment
11. Medical staff
12. Supporting medical services
13. Social services
14. Building
15. Cooperation with other institutions
16. These issues differ depending on:
17. Type of service
18. Patient expectations, high or low social class (financially)
19. Issues the institution should work on:
20. Specify type of patient
21. Give importance to each patient
22. Good hotel services
23. Cleanness
24. Provide social worker to help the patient
25. Easy access to transferring and admitting to institutions.
26. Applying regulations without disturbing the service or the visits
27. Having all the services in the same building, x-ray, lab. (equipment's alone don't provide good medical care, we have to take care of the doctors)
28. The social side of the equation is very important and very clear, give emphasis to the hospitals when answering this question.
29. Organising the institutions:
30. Accounting system doesn't exist , the absence law of the health ministry.
31. In health, it all starts from the patient and up to the doctor.
32. The problem of wrong diagnosis and wrong treatment.

33. (Sarcastically) If there is no law in the ministry to encourage the good doctor and punish the bad one, then there should be patient awareness so he knows what to choose.
34. It depends on the quality of the services, choosing the institution.
35. Contributing factors:
36. Location- is an indicator of the service quality
37. Staff and equipment
38. Good treatments and good circulation of patients.
39. Criticism or suggestions and ambitions?
40. We take what exists and develop it.
41. Let's define health:- Primary care (public departments), services, hospitals and clinics. What are the requirements to insure better care for the patient.
42. Provide basic requirements to define the patient condition. Provide the patient needs : find the proper facilities that insures living in a healthy environment is the base for that.
43. (back to the same problem), locate the place and the service provided there. (emphasis is on the patient) and (emphasise on the environment). What are the capacities, what exists and needed development. New construction.
44. Three things:
45. Hospitals: number, beds, staff: administration, doctors and nurses.
46. Beds: bed shortage in Palestine, updating the statistics regarding that.
47. Enough services for the public.
48. Beds number
49. Modern lab, enough equipment
50. Good management
51. Patient awareness regarding more than one area.
52. Two major problems:
53. Patient concepts: take the drug and feel better right away.. and not the treatment.
54. No good system to solve patient's problems
55. No good communication between the different levels of health in Palestine
56. Discussing the special circumstances in Palestine:
57. Any institution: provide excellent service while getting my share as a doctor.
58. What doesn't excellent mean? If I can't diagnose him then I should refer him to the right place, no consideration for the financial situation, the patient well being

comes first. (Concentrate on the Doctor), human side is very important beside the medical machines, the humanity face of the institution depends on the management, though the doctors are good.

59. The doctor is not happy about the situation, less doctors means more patients per doctor. Limit number of patient per doctor. Speciality in work.
60. Administrative procedures: the specialists should specialise in different fields so they will excel. Continues education so we know how to deal with everyday development and improve things around.
61. Talking about different hospital, is it a basic hospital or a referral hospital. The problem is defining them. Some cases should be transferred to university hospital where care is comprehensive and some specialities are not even known to us.
62. Service distribution. Speciality distribution. The existing finance should be given to good doctors from abroad such as Cardio doctors. So the qualification come back to Palestine. (hiring without qualification or education).
63. Same point: The existing problems among staff in an institution might continue.
64. Type of service.
65. Provide the staff.
66. Provide good environment for the staff.

Q2: To do your job right, what factors are most important (external to your organisation)

1. (use honesty in service)
2. Difficult to get to hospital because of the closure
3. How far the ministry policies in health affect the services: (The doctor's feeling of support and fairness from the ministry affects the way he conducts his work).
4. Regulations from a Higher Health Council: Quality control on healthcare
5. The ministry role in finding a system for health insurance
6. Medical manners (transfer problems), assuming an internal factor.
7. The most important factor is cooperation between the patient and the institution.
8. Health awareness makes a difference, whether the patient listens to the doctors instructions or he buys the medication and use it alone. The patient and his condition: there is no knowledge of health problems.

9. Political, economical situation (poor) and the security issues. Shortage of some departments in the health institutions, labs and pharmacy. The labs don't have all the test , no procedures and results from different labs for the same case). The pharmacies have a role too in educating the patient, usually the patient deals in the pharmacy with a regular worker or the pharmacist son and not himself directly. The pharmacy and the lab situation should improve to facilitate the doctor's job. Quality Control and Administrative Authority (General law for the assistant professions). Supply the staff with all the needed facilities. Locate the patient services, who supply these services? The medical staff (objection on the concept of "giving the patient services"). Services should be provided to the medical staff as well. Recruit the medical staff, existing facilities.
10. The occupation is the major factor, our situation as being occupied for a long time.
11. Going abroad
12. Education
13. Jerusalem [military] closure & transfer & visiting the patient

Q3: a. What are the characteristics of a good medical facility? Rank them please in order of important (1: most important);

b. If you need to refer a patient, what criteria do you use in selecting the referral facility?

(medical centre differs than an institution)

Priorities:

1. Well-qualified doctors
2. The ministry law doesn't solve the problems
3. Good medical staff
4. Proper and healthy building
5. Excellent services
6. Staff
7. Space/quiet location/close to the public and the media
8. Spacious and close to serve the public = the right location

(Making fun of having a law to punish the doctors)

B)

1. The qualified doctor with good facilities- we look at the name

2. Insurance (for the patient)
3. The patient budget
4. Patient condition and hospital distance (location)
5. The staff and the service (what are the existing equipment, ability to treat the patient)
6. First we look at the service, if there was more than one centre providing the service then we check the price, the distance, etc.
7. Tell the patient of his choices and suggest the best within his budget or distance (i.e. patients)
8. The best right place for the patient and if it was possible for me to follow up. Also if the patient could go (he tells us).
9. Give advice and leave the choice for the patient

***Q4:** For patients to receive good care, what are the most important aspects? Please write on the sheet provided.*

1. Whoever provides the good service: the good staff, good management, the administrative system, secretaries and files.
2. The patient financial capacity (and his awareness)
3. Good Staff
4. The doctor and proper staff for the patient
5. Good doctor
6. Mutual trust between the patient and the institution that gives the service
7. (the poor patient looks for the service more than the rich , even if he borrowed the money)
8. The patient goes to more than one doctor because of lack of trust
9. The known system here (should includes staff, education and awareness...): A comprehensive health system so the patient can get his rights fully.

***Q5:** If patients are presented with the following list (appendix 2), how would they rank the items from 1 to 7 (1 being most important to 10 least - you may give items similar ranking.*

- See pages 117, 118 for results

10.3.2 Note taker 2

Q1: In order to meet your expectations and satisfy your needs, what are the most important aspects a medical facility must provide either as a doctor or for your patients? (Clinically, physically, emotionally, amenities, etc.)

The factors and issues the medical institution should concentrate on to meet the doctor and the patient expectations:-

1. Your expectations as doctors whether public/private. Any place you get a service it is a health institution.
2. The situation needs to look at different issues:
3. The discrepancy between Gaza and the West Bank
4. The situation is not organised either in the public sector or the private one
5. Discrepancy in the information between the two sectors and it is shielded from the public.
6. We can imagine and give but the situation is tough
7. Each doctor has his own vision and the way to function; how to receive the patient and the tests taken. But what we dream of is different from reality
8. The most important part is the quality of service, patient comfort and his family's satisfaction
9. Providing all the needs for the patient
10. The government (public sector) lacks lots of necessities.
11. The UN: Going to a good hospital, is it available??
12. Provide awareness for the family
13. Avoid requiring too many demands from the family
14. Educate the family about the diet so the patient condition won't deteriorate.
15. Family convenient: not to have the tests for the patient in another institution.
16. Give the family the trust in the treatment through treatment
17. Providing the good staff and the hospital in the public sector that have all the specialities
18. Supplying all the teams in the same institution: Pharmacy, Physiatrist. etc.
19. Specify the main elements:
20. The staff, supporting services, healthy building, and easy to reach.
21. Cooperation with other institutions with the services we can't provide to the patient.

22. For the patient: diagnose the disease, its degree, expectations, if the patient is a high or low class, type of community, public or private sector.
23. We acknowledge the type of disease then studying the expectations.
24. The patient should feel the special treatment, this happens more in the private sector.
25. The patients don't feel that we care about them.
26. Basic regulations for all hospitals are well known and applied internationally, such as; patient visits: this usually disturbs the service.
27. Having social worker in the institution to investigate the financial situation of the patient.
28. Having clear and easy procedures for the patient to understand what to do.
29. Consider having a good building. Good quality: to pay for good doctors. Without good doctors we cannot make it. Also give good salaries. Good medical supporting services: lab, x-ray. In addition to no medical: social staff to deal with cases especially with children away from their school.
30. Lack of proper medical institution in Palestine.
31. As a doctor: I want the institution to be looked at as a whole, starting from the ministry and the minister down to the patient and going through the doctor. If there was no law to encourage the good doctor and punish the bad one (medically, not from the patient point of view), then there is no motivation.
32. WE have to have laws and a court for the doctors
33. The health ministry has a responsibility to educate the public about the good and bad institutions. The patient doesn't know that there are laws, everything is God's Will.
34. Lack of Medical law. The laws against the doctors don't exist.
35. It all depends on the patient and his expectations and what type of services are provided. What speciality he needs, and looking at that I decide whether it is good or not. The location, equipment, dealing with the patient, patient role in the institution.
36. Definition of health, from there we can build the structure
37. Necessities to provide good health for the patient.
38. Basic services that satisfies the patient either primary or secondary.
39. Provide the means for good environment
40. Healthy environment is the basic

41. If it was a public institution provide the environment and the medical services then the building and the clinics.
42. Every doctor wishes to supply the best service.
43. Let's concentrate on the hospitals: the number of hospitals, the number of beds, the staff, doctors and nurses.
44. In Ramallah region the beds are less than the need.
45. To give better service: we have to provide more beds, advanced lab not just one machine but supplying all the needed equipment for all the tests, good management, patient awareness by giving workshops and courses or from the doctor himself.
46. A problem the doctor faces is built-in concept of patient
47. Lack of system to solve the patient problems, the doctor ends up doing that.
48. -High expectations, the reality is far from them.
49. Good care means if I couldn't diagnose the patient then transfer him to the right place.
50. Same in the hospital, patient well being comes first.
51. Human side in giving service.
52. He might be a good doctor but working in a public sector where is no care is giving to the doctor. The doctor is not satisfied with his job; shortage of doctors and lots of patients.
53. Good management. All doctors know their rights and duties.
54. Speciality in work.
55. Continues education and up-dating.
56. There was occupation but now the situation is different
57. Internationally there are two levels of hospitals: Basic and referral.
58. The basic, regular hospitals are OK, but the referral ones are the problem such as Makasid [hospital] and Ramallah : University.
59. All specialities should be available in the referral hospital
60. Provide financial stability for the highly qualified personal so they will come back from abroad.
61. Even if the institution is good, providing the finance is essential.

Q2: To do your job right, what factors are most important (external to your organisation)

The major external factors that affect the doctor's service.

1. Honesty in the service
2. The patient is unable to get to the institution
3. If the doctor feels the fairness from the ministry and he gets his rights. The general regulations and the higher health council should ensure controlling the quality and service
4. The ministry role is to establish a health insurance so everyone can come to the institution. There should be medical honesty on the doctor's side.
5. Cooperation between the patient and the institution. The patient's health awareness level
6. Lack of medical and health awareness
7. Using medication with a prescription
8. Financially the patient sometimes can't go to the doctor.
9. Shortage in health institutions: hospitals, labs and pharmacies.
10. Each lab gives different result for the same problem. Pharmacies lack the pharmacist, a regular worker helps the patient.
11. All these have the same attribute; lack of quality control, no law and no authority exist.
12. Providing good medical services for the patient and the staff itself.
13. Give the good staff the best that is available.
14. The situation of the country; occupation and closure is the major external factor.

Q3: a. What are the characteristics of a good medical facility? Rank them please in order of important (1: most important);

b. If you need to refer a patient, what criteria do you use in selecting the referral facility?

1. The good health institution qualities
2. Qualified medical staff
3. Applying the health ministry regulations to solve the problems
4. Qualified medical staff
5. Good building
6. Good diagnosis and treatment
7. Good staff
8. Quiet and close location

9. Good location for the patient
10. Without the good staff nothing works
11. What is the use if it had everything and there is no law.
12. Have a good hospital then get a good staff.
13. The characteristics that should exist in the referral institution.
14. The Doctor and the capabilities
15. If the patient was insured or not, the finance is important
16. The patient budget
17. Depends on the patient condition, is the referral institution close or far
18. The staff and the service in the hospital and the equipment's
19. The best service the place provides to the patient and I can't , then the cheapest and closest
20. I give my personal medical opinion then the financial choices
21. Appropriate for the condition and I can follow-up
22. Provide the advice and the choice is for the patient

Q4: For patients to receive good care, what are the most important aspects? Please write on the sheet provided.

The priorities and qualities that should exist to provide the best service for the patient:

1. Ability to provide good service for the patient
2. Financial capacity
3. Good medical staff
4. A good doctor and good staff
5. Good doctor
6. The right and good staff
7. Trust
8. The most important one is the doctor
9. Even if the doctor is good the management should be good too.
10. The financial situation and the awareness that makes the patient decide and choose
11. Even the poor look for the good service.

Q5: If patients are presented with the following list (appendix 2), how would they rank the items from 1 to 7 (1 being most important to 10 least - you may give items similar ranking.

- See pages 117, 118 for results

10.3.3 Question summaries

The following set of notes were compiled by the author.

Q1: In order to meet your expectations and satisfy your needs, what are the most important aspects a medical facility must provide either as a doctor or for your patients? (Clinically, physically, emotionally, amenities, etc.);

Initially a brief discussion began as to the definition of a health centre and the background of the study being conducted.

One participant pointed out the regional difference in the country (Gaza and West Bank areas) and the mixture of service providers (UN, Government & private NGOs and private for profit sectors).

Another pointed to the differences in perception and practice within the medical profession itself on for example issues of “how patients are received”, “treated”, “quality of diagnostic procedures and tests”.

Thus a wide discrepancy exists in the nation in terms of “quality”.

Furthermore, in addressing question one:

The first comment dealt with the issue of “patient and family comfort” by a need to address “availability of diagnostic procedures, referral facilities, and access to more comprehensive care”

“The family needs to be informed of the patient’s medical conditions” and the family should not be asked to carry out “tasks” associated with care.

Others countered that the family has a role in care, although they may cause “errors”

The issue of geographic access to a facility was raised as a possible barrier to quality care

The current system causes patients to “shop” for medical care outside the public sector

Many disciplines (specialities) needed to offer medical care are missing in area.

Q2: To do your job right, what factors are most important (external to your organisation);

The second question evoked discussion that was related to the general points raised in question 1. The participants raised a key issue relating the role of doctors in decision-making. They felt this had to be strengthened for them to be able to do “better jobs”. The importance of the role of support staff and equipment in provision of good care raised was also noted.

Other key factors stated by participants:

- ☐ Quality of care in a facility
- ☐ Honesty from employees
- ☐ Role in decision-making for medical doctors had to be strengthened
- ☐ Ability to pay and types of insurance available
- ☐ Relationship between patient and institution
- ☐ Lack of access due to limited numbers of facilities and providers
- ☐ Good diagnostic equipment not available
- ☐ Lack of qualified pharmacists
- ☐ Specifics for local political situation in terms of limiting access due to military area closure and road blocks
- ☐ “you cannot give quality services if you only listen to patient” , “MD is part of a team”
- ☐ Quality control is lacking

Q3: a. What are the characteristics of a good medical facility? Rank them please in order of important (1: most important);

b. If you need to refer a patient, what criteria do you use in selecting the referral facility?

Participants consistently identified the competence of Doctors as central to what may be deemed “good medical facility”

Q4: For patients to receive good care, what are the most important aspects? Please write on the sheet provided.

Participants raised the following issues:

Quality of personnel, management systems, doctor competence, mutual trust with patients, patient ability to pay, and national regulatory systems.

11 Appendix III: Household survey forms and instructions

Data entry: Ms. Hayat Abu-Saleh
Conducted in Arabic

11.1 The survey

1 page – double sided (translation from Arabic)
(1) Form 1

Table 11-1: Household survey form - Parts 1 to 4

Gender	<input type="checkbox"/> male <input type="checkbox"/> female
Profession	<input type="checkbox"/> unemployed <input type="checkbox"/> professional <input type="checkbox"/> technical * Works or has worked in a health or medical centre? Yes No
Residence	<input type="checkbox"/> city <input type="checkbox"/> village <input type="checkbox"/> camp _____
age group	<input type="checkbox"/> 18-34 yrs <input type="checkbox"/> 35-54 yrs <input type="checkbox"/> +55 yrs
years of education completed	<input type="checkbox"/> none <input type="checkbox"/> 1-12 yrs <input type="checkbox"/> +13 yrs

Serial No. PCBS

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Was the form left with the family after the first visit? Yes No

Part 3

Imagine yourself in a future date as a user or visitor or patient in a clinic or hospital or medical centre

Please read the following table completely at first, and then mark the most important attributes to satisfy your needs in a descending order from 1 most important to 7 less important (mark your answers in the first column only)

Rank	Item
	Cleanliness
	MD Competence
	Equipment (Sophisticated) availability
	Treatment by MD
	MD adherence to appointments
	Treatment by the staff
	Fees (Cost of service)
	Orderliness in system
	Information given about case
	Privacy & Confidentiality
	Level of comfort
	Gender of medical provider choice
	Information on General Health Issues
	Appointment taking by phone
	Time Waiting
	Time spent with MD
	Medical records keeping
	Hours of operation
	Hotel services & extras
	Second medical opinion access
	Time spent on Admin matters
	Other

Part 4

Have you visited a clinic, hospital or medical centre in the past <u>five</u> years in Palestine (West Bank & Gaza)	<input type="checkbox"/> yes	<input type="checkbox"/> no
Have you received any treatment in the past <u>10</u> years in hospitals or medical centres in Israel or abroad?	<input type="checkbox"/> yes	<input type="checkbox"/> no

11.2 Attributes in forms 1,2 & 3 as presented to respondents

The attributes were randomised for the three types of forms to verify for latency and/or primacy effects.

Table 11-2: Household survey forms 1,2,3 as presented

White Form 1	Green Form 2	Pink Form 3
Cleanliness	MD adherence to appointments	Hotel Services and Extras (food, comfort, TV)
Level of comfort	Information on health awareness	Time spent with MD
Time Waiting	Privacy & Confidentiality	Information given about case
MD competence	Medical records keeping	Equipment (Sophisticated) availability
Treatment by the MD (non-clinical)	Treatment by staff	Time spent on Admin matters
Fees (cost of service)	Second medical opinion access to	Appointment taking by phone
Hours of operation	Gender of medical provider choice	Orderliness in system
Hotel Services and Extras (food, comfort, TV)	Cleanliness	MD adherence to appointments
Time spent with MD	Level of comfort	Information on health awareness
Information given about case	Time Waiting	Privacy & Confidentiality
Equipment (Sophisticated) availability	MD competence	Medical records keeping
Time spent on Admin matters	Treatment by the MD (non-clinical)	Treatment by staff
Appointment taking by phone	Fees (cost of service)	Second medical opinion access to
Orderliness in system	Hours of operation	Gender of medical provider choice
MD adherence to appointments	Hotel Services and Extras (food, comfort, TV)	Cleanliness
Information on health awareness	Time spent with MD	Level of comfort
Privacy & Confidentiality	Information given about case	Time Waiting
Medical records keeping	Equipment (Sophisticated) availability	MD competence
Treatment by staff	Time spent on Admin matters	Treatment by the MD (non-clinical)
Second medical opinion access to	Appointment taking by phone	Fees (cost of service)
Gender of medical provider choice	Orderliness in system	Hours of operation

11.3 ANOVA comparison of means results

To compare three or more means, the one-way analysis of variance (ANOVA) method was used. (Kramer, 1988). The primary result of a one-way ANOVA is a *P* value representing an overall test of the null hypothesis that the means are equivalent. The assumptions are that the groups are equivalent: that they represent random samples from hypothetical source populations with identical outcome means.

The results (Sig. Column) below marked in red show that the resulting means did vary at the 95% confidence interval between the three form types.

Table 11-3: ANOVA comparing form type means

ANOVA test of variance to compare 3 means									
if $P < 0.05$ then the means are NOT equivalent									
			Sum of Squares	df	Mean Square	F			Sig.
Administrative Processing Time	Between Groups		2.40	2	1.201	0.535			0.592
	Within Groups		58.36	26	2.244				
	Total		60.76	28					
Ability to make appointment over phone	Between Groups		1.38	2	0.692	0.212			0.809
	Within Groups		313.16	96	3.262				
	Total		314.55	98					
Cleanliness	Between Groups		59.92	2	29.960	8.948			0.000
	Within Groups		1258.98	376	3.348				
	Total		1318.90	378					
Level of Comfort	Between Groups		16.95	2	8.477	2.457			0.091
	Within Groups		327.75	95	3.450				
	Total		344.70	97					
Competence of Medical Doctor	Between Groups		18.89	2	9.443	2.752			0.065
	Within Groups		1241.93	362	3.431				
	Total		1260.81	364					
Sophisticated Medical Equipment Availability	Between Groups		18.24	2	9.121	2.909			0.056
	Within Groups		899.86	287	3.135				
	Total		918.10	289					
Fees for Services	Between Groups		17.41	2	8.703	2.427			0.091
	Within Groups		677.84	189	3.586				
	Total		695.25	191					
Availability of Information on General Health	Between Groups		6.12	2	3.060	1.086			0.341
	Within Groups		284.50	101	2.817				
	Total		290.62	103					
Hotel Services & Extras	Between Groups		5.81	2	2.903	0.950			0.394

Screen snap shot of the data file (SPSS 7.5 for Windows) – value labels shown

Figure 11-1: Household survey SPSS table showing value labels

Merged Data Backup Sept 16 99 - SPSS Data Editor												
File Edit View Data Transform Statistics Graphs Utilities Window Help												
1:form_type												
	form_type	serial#	pcbs#	gender	profsn	hlth_bck	residnc	age_grp	educ	bias	rcnt_vst	abr
1	White	114	10175	Male	Technical	No	Town	18-34 yrs	1-12 yrs	Yes	Null	
2	White	75	10155	Female	Technical	No	Town	35-54 yrs	13+ yrs	No	Yes	
3	White	74	10145	Female	Unemployed	Null	City	18-34 yrs	1-12 yrs	Null	Yes	
4	White	57	10141	Female	Unemployed	No	City	55+ yrs	Zero yrs	Yes	No	
5	White	54	10140	Female	Unemployed	No	City	18-34 yrs	13+ yrs	Yes	No	
6	White	55	10139	Female	Unemployed	No	City	18-34 yrs	13+ yrs	No	No	
7	White	59	10130	Female	Technical	No	City	18-34 yrs	1-12 yrs	Yes	No	
8	White	98	10065	Female	Unemployed	No	City	35-54 yrs	Zero yrs	No	Yes	
9	White	97	12101	Female	Unemployed	No	Town	35-54 yrs	1-12 yrs	No	Yes	
10	White	96	12098	Female	Unemployed	No	Town	18-34 yrs	1-12 yrs	No	Yes	
11	White	120	10156	Male	Professional	No	Town	18-34 yrs	1-12 yrs	No	Yes	
12	White	115	10176	Male	Technical	No	Town	35-54 yrs	1-12 yrs	Yes	Yes	
13	White	106	10197	Female	Unemployed	Null	Town	18-34 yrs	1-12 yrs	No	Yes	
14	White	50	11095	Female	Unemployed	No	City	18-34 yrs	1-12 yrs	Yes	No	
15	White	466	12107	Male	Technical	No	Town	35-54 yrs	13+ yrs	No	Null	
16	White	14	11009	Female	Unemployed	No	City	35-54 yrs	1-12 yrs	No	Yes	
17	White	39	11197	Female	Unemployed	No	City	18-34 yrs	1-12 yrs	Yes	Yes	
18	Pink	236	11177	Female	Unemployed	Null	Town	55+ yrs	Zero yrs	Yes	Yes	
19	White	33	11221	Female	Unemployed	Yes	Town	35-54 yrs	1-12 yrs	Yes	Yes	
20	White	20	11088	Female	Unemployed	No	Town	35-54 yrs	1-12 yrs	Yes	Yes	
21	White	46	10057	Male	Technical	Yes	Town	35-54 yrs	13+ yrs	Yes	Yes	

SPSS Processor is ready

Screen snap shot of the data file (SPSS 7.5 for Windows) – coded values shown

Figure 11-2: Household survey SPSS table showing coded values

Merged Data Backup Sept 16, 99 - SPSS Data Editor												
File Edit View Data Transform Statistics Graphs Utilities Window Help												
1:form_type												
	form_type	serial#	pcbs#	gender	profn	hlth_bck	residnc	age_grp	educ	bias	rcnt_vst	abr
1	1	114	10175	1	3	2	2	1	2	1	0	
2	1	75	10155	2	3	2	2	2	3	2	1	
3	1	74	10145	2	1	0	1	1	2	0	1	
4	1	57	10141	2	1	2	1	3	1	1	2	
5	1	54	10140	2	1	2	1	1	3	1	2	
6	1	55	10139	2	1	2	1	1	3	2	2	
7	1	59	10130	2	3	2	1	1	2	1	2	
8	1	98	10065	2	1	2	1	2	1	2	1	
9	1	97	12101	2	1	2	2	2	2	2	1	
10	1	96	12098	2	1	2	2	1	2	2	1	
11	1	120	10156	1	2	2	2	1	2	2	1	
12	1	115	10176	1	3	2	2	2	2	1	1	
13	1	106	10197	2	1	0	2	1	2	2	1	
14	1	50	11095	2	1	2	1	1	2	1	2	
15	1	466	12107	1	3	2	2	2	3	2	0	
16	1	14	11009	2	1	2	1	2	2	2	1	
17	1	39	11197	2	1	2	1	1	2	1	1	
18	3	236	11177	2	1	0	2	3	1	1	1	
19	1	33	11221	2	1	1	2	2	2	1	1	
20	1	20	11088	2	1	2	2	2	2	1	1	
21	1	46	10057	1	3	1	2	2	3	1	1	

SPSS Processor is ready

12 Appendix IV: Demographic and health indicators in West Bank and Gaza

12.1 West Bank society and culture

The Palestinian Arab population of the West Bank is often viewed by European and North American observers as a conservative one. The population is predominantly Moslem (20% Christian) with an agriculture and tourism economy base. Due to the nature of the political conflict in the region over the past five decades, approximately 50% of the population are either displaced persons or registered refugees in camps that resemble shantytowns. The region has witnessed various forms of military occupation, political conflict, and a civil uprising over the past 4 decades.

The society is male dominated with an emphasis on group responsibilities and very strong nuclear and extended family links. The judicial and legal enforcement systems are new and evolving.

Four main providers of healthcare offer a variety of services ranging from basic primary care to advanced tertiary care: Government health services, non-governmental organisations (NGOs), private-for-profit sector, and the United Nations Relief and Works Agency (UNRWA). National healthcare expenditure is estimated at approximately US\$ 150-175 representing 10% of GDP. The population has easy access (for a fee or through official ministry of health referrals) to highly sophisticated care in Israel, and to facilities in neighbouring Jordan and Egypt. Moreover, over two million Palestinians live in the surrounding nations as residents or citizens. A high level of interaction exists between the West Bank population and Palestinians in other regions and nations.

Ministry of health services are part of a voluntary national health insurance scheme (with approx. 45% of population covered). NGOs offer services at highly subsidised rates. UNRWA services are free at the primary care level and highly subsidised at the secondary care level. The private-for-profit sector has been expanding rapidly over the past 4 years in a wide range of secondary care and advanced diagnostics (lab, CT, MRI)

The peace agreement (Oslo accords) of 1994 ushered in an era of rapid investment and modernisation in most sectors of the West Bank and Gaza. Many of those projects and programmes are underway.

12.2 Health & social indicators

Palestinian society is described as one in transition: exhibiting the disease profile of the industrialised and developing worlds simultaneously.

The population (2.2 Million) is 46.5% under age 15. (*Source: Palestinian Central Bureau of Statistics 1995 Survey – www.pcbs.org*) The dependency ratio is 99.6. 50% live in households of 8 members or less, while mean household size is 7.

Approx. 80% live in households they own. 81% of households have access to tap water, but of these 14.6% experience weekly shortages. 97.9% of households are connected to the public electrical grid.

The literacy rate is 84.3% among those aged 15 years and above. Approx. 85.1% of children aged 6 to 17 is in school.

The median age at marriage is 33 for males and 18 for females. 3.5% of marriages are polygamous. Approx. 49% of marriages is between members of the same extended family (clan)

The total fertility rate is 6.06, with 5.44 in West Bank and 7.41 in Gaza. There is evidence the rate is beginning to decline.

On average, a married Palestinian woman has 4.79 children, of which 0.30 die.

Currently the median age at first birth is 20.7.

Infant mortality has shown a steady decline in recent years, and is now 25.5 (per 1,000 live births) in West Bank and 30.2 in Gaza. The under 5 child mortality is 31 in the West Bank and 37 in Gaza. Life expectancy is 70 for Males, 73.7 for females.

Maternal mortality is estimated at 70-80 per 100,000 births.

Of Palestinians living in the Gaza and the West Bank, 91.9% are locally born, 3.8% in Israel and 4.3% in other countries. About 60% of households in the West Bank have immediate relatives living abroad, compared with 53% of the Gaza Strip households. Most relatives abroad reside in Jordan (49.2%). Forty-three percent (43%) have an Israeli identity card.

Figure 12-1: Geographic map of West Bank and area

